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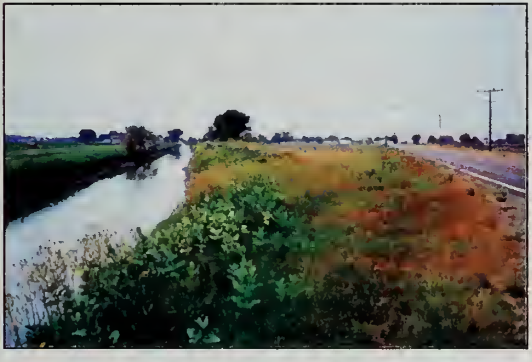
Dodson - East

Environmental Assessment and Nationwide Section 4(f) Evaluations

For:
Project F1-8(15) 454; Control No. 1516
Phillips County, Montana



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ENVIRONMENTAL ASSESSMENT
and
"NATIONWIDE" *SECTION 4(f)* EVALUATIONS

DODSON - EAST

PROJECT F 1-8 (15) 454; CN 1516

PHILLIPS COUNTY, MONTANA

This document is prepared in conformance with the *Montana Environmental Policy Act (MEPA)* requirements and contains the information required for an Environmental Assessment under the provisions of ARM 18.2.237(2) and 18.2.239. It is also prepared in conformance with the *National Environmental Policy Act (NEPA)* requirements for an Environmental Assessment under 23 CFR 771.119 and *Section 4(f)* of the *U.S. DEPARTMENT OF TRANSPORTATION Act* under 23 CFR771.135.

Submitted pursuant to:

42 U.S.C. 4332(2)(c), 49 U.S.C. 303 and
Sections 2-3-104, 75-1-201, M.C.A.

by the

U.S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration

and the

MONTANA DEPARTMENT OF TRANSPORTATION

Submitted by:

Dave Hill Date: 11-19-02
MONTANA DEPARTMENT OF TRANSPORTATION
Environmental Services

Reviewed & Approved for
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Federal Highway Administration

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I. Description of the Proposed Action

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A. Introduction

The MONTANA DEPARTMENT OF TRANSPORTATION (MDT) plans to improve transportation in Phillips County by reconstructing 7.2 kilometers (km), about 4.5 miles, of U.S. Highway 2 (US 2) immediately east of the Town of Dodson. The proposed work would be done under a project designated by MDT as "Dodson-East" [Project Number F 1-8 (15) 454, Control Number 1516].

MDT classifies US 2 as a Rural Principal Arterial and has designated the route as part of the National Highway System (NHS). The National Highway System (NHS) includes approximately 256,000 km (160,000 miles) of roadway important to the nation's economy, defense, and mobility. Within Montana, the NHS consists of over 6,196 km (3,850 miles) of the state's most important transportation routes, including the Interstate System, other principal arterials, and portions of the military's Strategic Highway Network.

B. Project Location, Length and Termini

Project Area Location. The Town of Dodson is located about 6.4 km (4 miles) east of the Blaine and Phillips county line in north-central Montana. Dodson is located about 27 km (17 miles) west of Malta, the County Seat for Phillips County. Dodson is 47 km (29 miles) east of Harlem and about 80 km (50 miles) east of Chinook, the County Seat of Blaine County. Havre, the largest community in north-central Montana, is situated 115 km (72 miles) west of Dodson on US 2. The Fort Belknap Indian Reservation lies immediately south and west of Dodson on lands in Phillips and Blaine Counties.

The general location of the project area in Montana and Phillips County is shown in **FIGURE 1.**

Project Termini. This proposed 7.2 km (4.5 mile) long road reconstruction project begins east of the Dodson North Canal Bridge at Reference Point (RP) 454.1 and extends easterly to RP 458.6 located east of the Burlington Northern Santa Fe Railway overpass structure. The first 0.6 km (0.4 miles) of the project lies within the incorporated municipal boundaries of Dodson and the remainder of the project corridor is in rural Phillips County.

RP 454.1 was selected as the western terminus for this proposed project because this location is at the eastern end of a previous highway improvement project (RF 153 12). RP 458.6 was selected as the eastern terminus because the railroad overpass presents safety concerns due to its narrow roadway width and the curves on the approaches to the structure. Ending the project at RP 458.6 allows sufficient area for transitioning from a wider road to the existing highway.

FIGURE 2 shows the specific section of US 2 proposed for reconstruction under the Dodson-East project. **PHOTO PLATES 1** and 2 show typical landscapes in the project area.

C. Scope of the Proposed Project

The proposed project involves reconstructing the existing roadway to provide a consistent horizontal and vertical alignment to blend with the topography, enhance safety, and provide more uniform driving conditions for motorists. Within Dodson, the project would rebuild US 2 to a 12.0 m (39.3-foot) wide finished surface accommodating two 3.6 m (11.8 foot) wide driving lanes and two 2.4 m (7.9 feet) wide shoulders. A new 12.8 m (42.0 feet) wide paved surface would be provided to replace the existing pavement that varies in width from 7.9 and 9.1 m (26 to 30 feet) in rural portions of the corridor. The new road would have two 3.6 m (11.8 foot) wide driving lanes and two 2.8 m (9.2 foot) wide shoulders outside of Dodson. This increased road width would allow for a future pavement overlay.

Changes would be made to the roadway's horizontal and vertical alignments to flatten and straighten curves. Roadside slopes would be flattened and upgrades would be made to signing, striping and guardrail within the project corridor.

The proposed project is situated in mostly flat terrain. Horizontal and vertical alignments would be designed to meet the requirements for a design speed of 110 km/hr (about 70 mph). This design speed is consistent with standards for Principal Arterial routes in level terrain as outlined in MDT's Road Design Manual. With the exception of vertical curves at the railroad overpass, the proposed highway reconstruction would be done to comply with MDT's Geometric Design Standards for Principal Arterials.

The BNSF Railway and the Dodson North Canal parallel the existing highway on the north and on the south, respectively. Due to the proximity of these features to the highway, reconstructing US 2 following its present alignment is undesirable. Therefore, about 2.2 km (1.4 miles) US 2 would be reconstructed on an alignment immediately south of the Dodson North Canal.

The Burlington Northern Santa Fe (BNSF) Railway overpass at RP 458.3 would also be replaced as a part of this project. In addition, new bridges may be built at the Dodson Creek Overflow at RP 456.0 and Spring Coulee at RP 457.7. New structures would be required to cross the Dodson North Canal in two locations. All other existing culverts in the project area would be evaluated and modified or replaced as needed.

Drainage improvements and some utility relocation would be included in the project, and new right-of-way must be acquired along most of the project corridor. Some "urban" improvements such as curb and gutter, sidewalks, lighting, and crosswalk striping would be constructed within the community of Dodson.

More details about the proposed improvements and alternatives considered are in Part III of this Environmental Assessment.

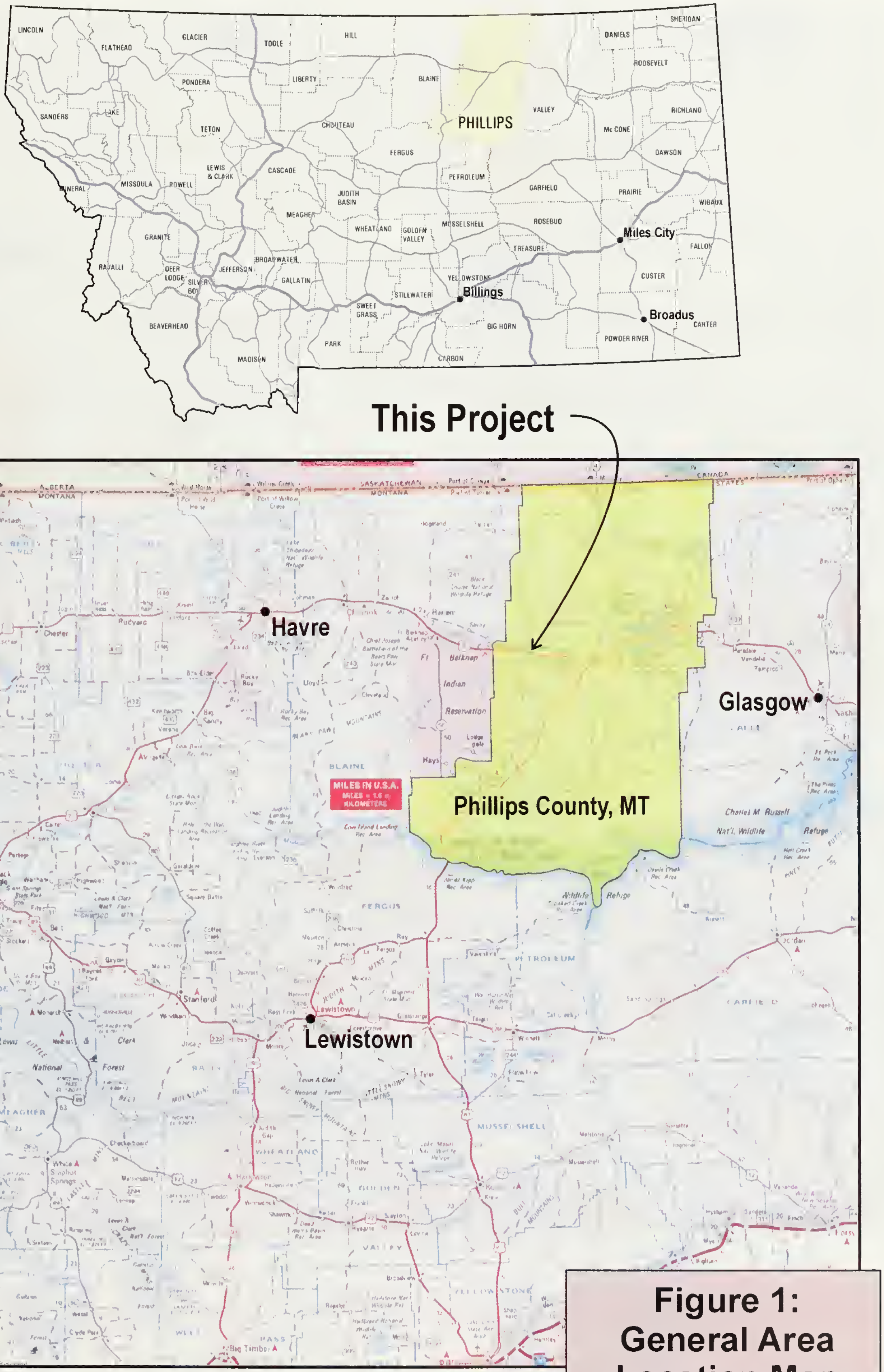

Figure 1: General Area Location Map

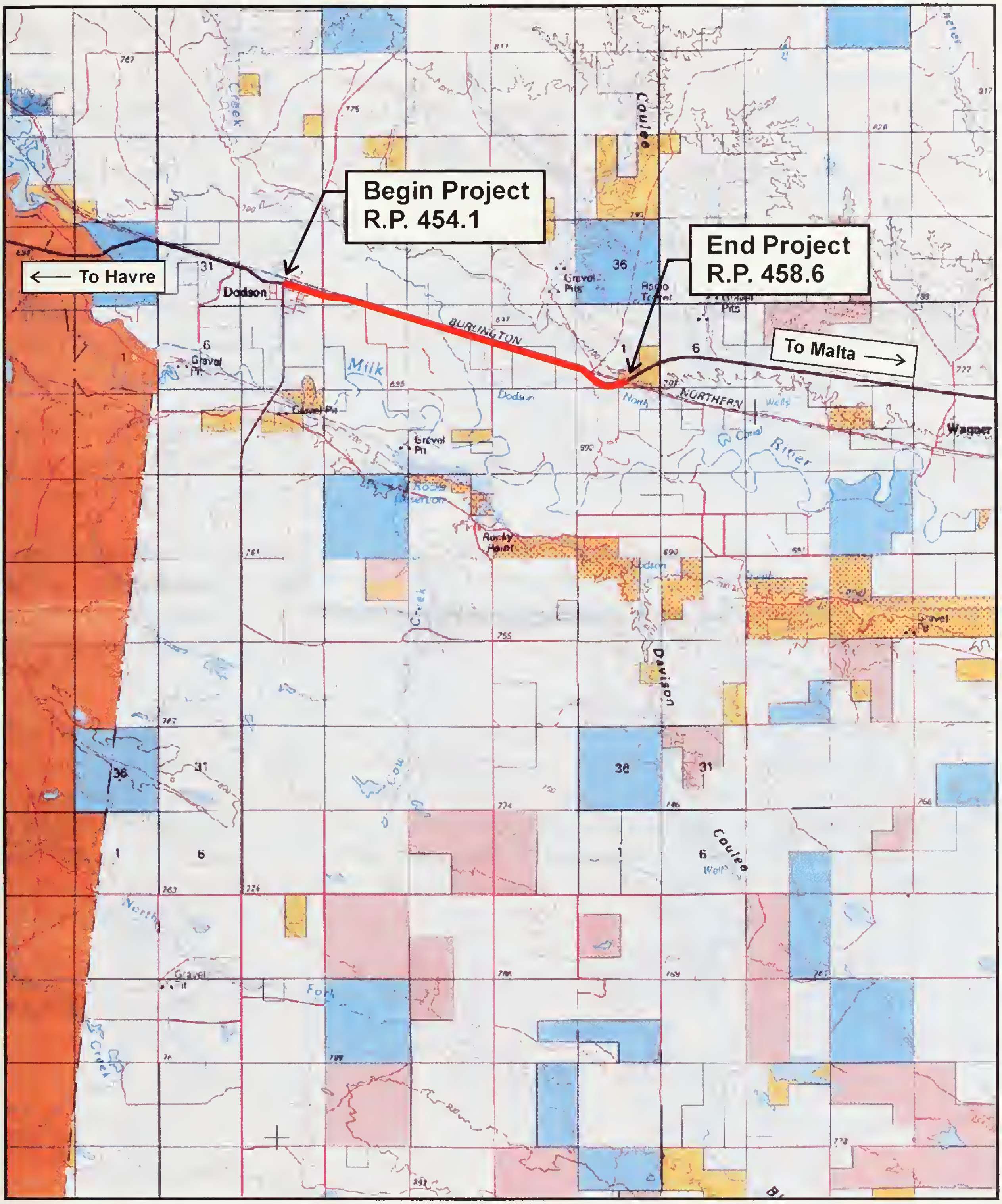

**Figure 2:
Project Location Map**

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D. Project Funding

The proposed improvements would be financed under Montana's NHS Program with funds from the Federal Highway Trust Fund. These funds are available through the *TRANSPORTATION EQUITY ACT FOR THE 21ST CENTURY* (TEA-21) and are administered by the FEDERAL HIGHWAY ADMINISTRATION (FHWA). NHS funding is about 87% federal with a 13% state match.

E. Jurisdiction

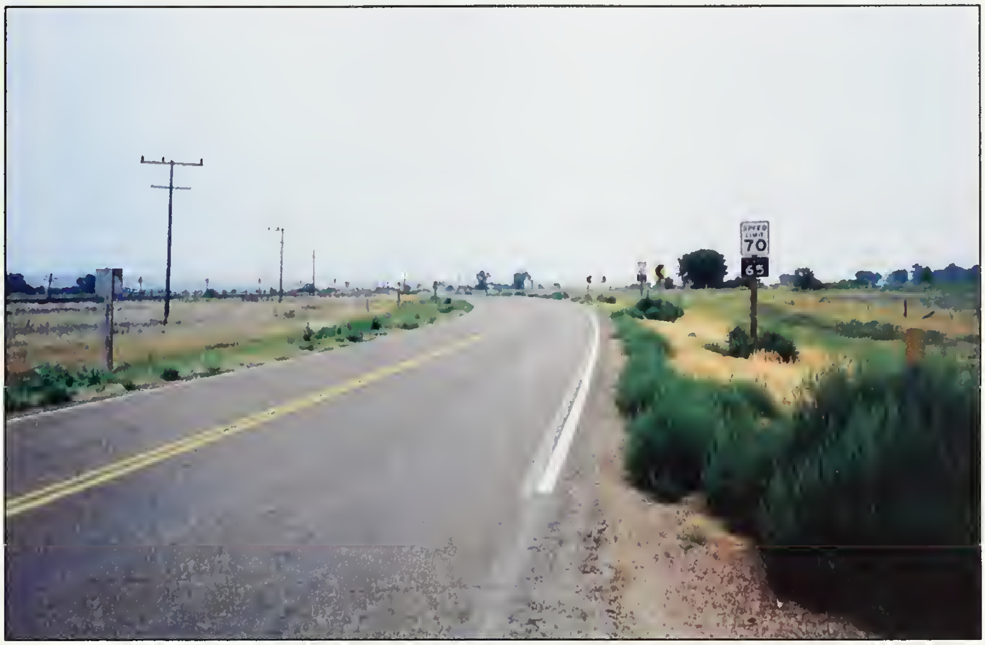
MDT has full maintenance responsibilities for US 2 including the portion of the route located within Dodson. Major roads intersecting the Dodson-East corridor are under the jurisdiction of and maintained by either the Town of Dodson or and Phillips County.

The U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF RECLAMATION is a cooperating agency due to their ownership and management of the adjacent Dodson North Canal and associated irrigation facilities in the project corridor.

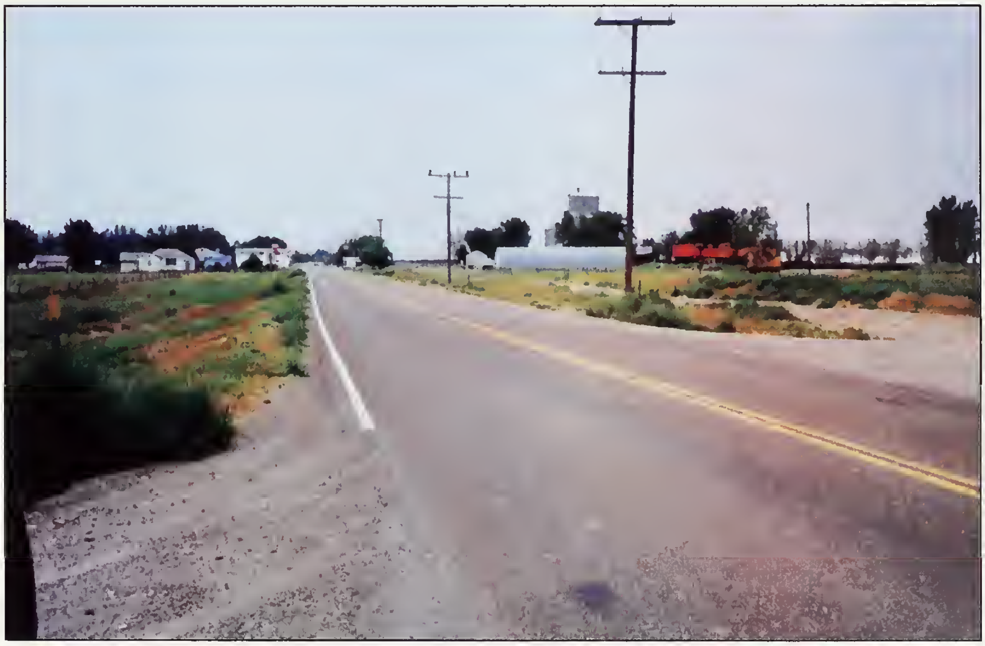
The Dodson-East project corridor also crosses federal lands administered by the U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT (BLM) near the end of the project. The Dodson-East corridor crosses BLM lands located in the following legally described area: Township-30-North; Range-27-East; NE ¼, SE ¼, & SW ¼ of the SE ¼ of Section 1, M.P.M.

Numerical daytime speed limits went into effect in Montana on May 28, 1999, replacing the "basic rule" as Montana's primary speed limit law since 1995. The 1999 Legislature has established day and night speed limits for all state roads. The current daytime speed limit on rural sections of US 2 is 112.6 kilometers per hour (km/h) (70 mph) for cars and light trucks and 96.6 km/h (60 mph) for heavy trucks. Nighttime speed limits on the route are 8 km/h (5 mph) less for all vehicles. The posted speed limit through the Town of Dodson (RP 454.1 to 454.4) is 30 mph (48.3 km/h).

The Montana Highway Patrol and the Phillips County Sheriff's Department share the responsibility for law enforcement on US 2.



Looking east along the present alignment of US 2 at Dodson.



Looking west along US 2 at the Town of Dodson.

Photo Plate 1: Project Area Photos

Looking east along US 2. Note Burlington Northern Santa Fe Railway at right of photo.

View of US 2 from approximately one-mile west of the existing railroad overpass.

Photo Plate 2: Project Area Photos

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II. Purpose and Need for the Project

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A. Purpose

This section of the EA discusses the purpose of the proposed improvement project on US 2 and describes the transportation and other needs of the Dodson-East corridor. These "needs" primarily relate to traffic safety concerns and deficient conditions associated with the roadway and its features. The alternatives in Part III were developed in response to these transportation needs.

The fundamental purpose of the proposed improvements is to upgrade a portion of US 2 to provide for the safe and efficient movement of traffic. To accomplish this purpose, the proposed action must:

- incorporate physical changes to the roadway and its adjoining environment to increase the safety, comfort, and convenience of the traveling public;
- bring the road's design into compliance with MDT's design standards for Rural Principal Arterials;
- reduce maintenance requirements and costs associated with the roadway, bridges and other drainage facilities on the route; and
- enhance transportation on a route important to Montana's and the nation's economy.

B. Transportation and Other Needs

This section identifies the problems or concerns that already exist with the current transportation facility or that will exist if the proposed improvements are not implemented. The section begins with a brief history of the proposed project and a discussion of the road's use.

1. PROJECT HISTORY AND STATUS

The existing roadway in the Dodson-East project area includes portions of three different projects. The section of US 2 within Dodson was reconstructed in 1978 as part of Project RF 153 12. The majority of the highway corridor (between RP 454.1 and 457.7) was reconstructed under Project F 153 (5) in 1949. Since then, this portion of the roadway has been sealed and covered and has received maintenance overlays. The existing roadway east of RP 457.7 was reconstructed in 1963 and improved in 1978 under Project F 1-8 (1). The BNSF Railway overpass at RP 458.3 was built in 1936 and has not received major improvements since that time.

Authorization from the FHWA to begin preliminary engineering work on this project was received in March 1991. MDT's current "Plans Ready" date for the project is July 2003.

2. FUNCTIONAL CLASSIFICATION

MDT classifies Montana's highway system based on the character of service (or function) each route provides. The functional classification system recognizes that each highway or street provides varying levels of access to property and travel mobility. Functional classification also provides the framework for determining the geometric design elements of individual highways and streets. Once the function of the highway is defined, the appropriate design controls, roadside safety elements, amenities, and other design values can be determined.

US 2 is classified as a Rural Principal Arterial. Such highways are characterized by their capacity to quickly move relatively large volumes of traffic. The arterial system provides for higher travel speeds and for the longest trip movements. Rural principal arterials are highways that link to other arterials and major destinations and transportation facilities. As indicated previously, the inclusion of US 2 on the NHS verifies the importance of the route to the statewide and national transportation network.

3. CURRENT AND PROJECTED ROAD USE

Current Road Use. US 2 is important to interstate and international commercial transportation because it links all major cities and towns in northern Montana and it connects to other key interstate and regional transportation routes. US 2, the only continuous east-west route in northern Montana, links Interstate 15 at Shelby and Interstate 29 at Grand Forks, North Dakota. These Interstate routes facilitate commerce between the US and Canada and Mexico. Travel on US 2 east or west of the project area allows highway users to access US 87 at Havre and US 191 at Malta, other regionally important north-south NHS routes.

US 2 is also a regionally significant transportation route since a large amount of travel on the roadway is from area farms and ranches to local agricultural markets or loading facilities on the BNSF Railway line. Rural residents and residents of many communities along Montana's Hi-Line commonly use this route to access shopping and services in the regional trade centers of Havre, Chinook, Malta, Glasgow, and Wolf Point. US 2 functions as the "main street" for local commerce in many Hi-Line communities.

US 2 accesses Tribal land along the northern edge of the Fort Belknap Indian and crosses numerous federal and state lands along its length. A variety of outdoor recreation sites in Dodson area can be accessed from the highway including the Bowdoin National Wildlife Refuge near Malta and Nelson Reservoir and Sleeping Buffalo Hot Springs near Saco. Further east, the route can be used to access numerous recreation sites on Fort Peck Lake located south of Glasgow. US 2 provides general access to the Milk River that generally parallels the highway from Havre to its confluence with the Missouri River east of Glasgow. The route is also designated as part of the historic Lewis and Clark Trail as it passes through Montana.

This highway also serves a notable amount of local traffic generated by area residents traveling to and from Dodson and farms and ranches in the outlying area.

Current and Future Traffic Volumes. MDT's design traffic data for this section of US 2 is summarized in **TABLE 1**. The estimated current average daily traffic on this section of road is about 1,250 vehicles per day. As the table shows, the average daily traffic volume twenty years from now at this location is projected to be 1,690 vehicles per day. MDT's traffic data indicates that traffic volumes within the Dodson-East corridor are anticipated to grow by about 1.5% annually over the foreseeable future. **TABLE 1** shows that trucks comprise less than 14% of all traffic on US 2 in the project area.

TABLE 1: Current and Estimated Future Traffic
US Highway 2 Near Dodson

1990 Average Daily Traffic (ADT)	1,050 vehicles per day
1996 ADT	1,150 vehicles per day
Estimated Current (2002) ADT	**1,260** vehicles per day
Projected Future (2022) ADT	**1,690** vehicles per day
Directional Distribution	55%-45%
Percent Trucks	13.5% of all vehicles
All Trucks	45.0%

NOTE: **Bold text** indicates traffic volume estimate by Robert Peccia & Associates based on 1.5% annual growth rate on this section of US 2 using the 1996 ADT as a base year volume.

Current and Future Level of Service. MDT's Transportation Planning Division prepared traffic information in December 2000 that included a review of the Level of Service (LOS) on US 2 over the entire length of the route in Montana. According to this work, the segment of US 2 that includes the Dodson-East project currently operates at Level of Service (LOS) B. LOS B denotes relatively free-flowing traffic conditions with little, if any, delay commonly experienced by highway users. LOS A represents traffic conditions that are totally free flowing and without delay and LOS F refers to gridlock. Future traffic projections for US 2 in the vicinity of Dodson suggest a slight decline in operational efficiency (LOS C) over the next twenty years if no facility improvements were implemented.

Traffic Variations. MDT maintains a permanent automatic traffic recording station (Station A-46) on US 2 located 14.5 km (9 miles) west of Havre. Although this count station is a considerable distance from the Dodson-East project area, information from the station is indicative of traffic annual variations. MDT's data shows that travel on US 2 in this portion of northern Montana is lowest during the month of January when traffic is typically only about 70% of the annual ADT volume. Travel is highest during the summer months of June, July and August when volumes are generally 20 to 50% higher than the annual ADT.

Travel on US 2 is typically the lowest on Sundays each month and highest on Fridays.

4. ROADWAY AND BRIDGE DEFICIENCIES

The consistency and predictability of driving characteristics are important features of a safe and convenient road. Differences in the physical conditions of the road or inconsistencies in the way the road is designed reduce the predictability of driving conditions for road users. The lack of predictability in roadway conditions or design can have a direct bearing on the overall safety of the roadway.

Sharp curves around terrain features or over the crests of hills do not provide sufficient distance for a motorist to see obstructions in the roadway and to stop if necessary. Such curves are said to lack adequate stopping sight distance. The AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) defines stopping sight distance as the length of roadway ahead visible to the driver. The minimum sight distance on a roadway should be long enough to allow a vehicle traveling at or near the design speed to stop before reaching an object in its path. Although greater sight distance length is obviously desirable, the minimum stopping sight distance should be provided at every point on the roadway.

The amount of stopping sight distance required depends mostly on the design speed (the driving speed for which the road was or is being designed). The design speed is used to determine the various geometric design features of the roadway and is established based on the travel desires and habits of highway users, topography, adjacent land use, and the functional classification of the highway. All of the pertinent features of the highway must be related to the design speed to obtain a balanced and sound design for the facility. The appropriate design speeds for various functional classifications of roads in Montana have been established and are published in MDT's "Road Design Manual." MDT has established 110 km/h (70 mph) as the appropriate design speed for this section of US 2.

Requirements for stopping sight distance length, as well as other geometric features such as horizontal and vertical curvature and superelevation (the degree of banking on curves), are directly related to and vary substantially with design speed. Other features, like pavement and shoulder widths and clearances to roadside obstructions, are not directly related to design speed but they affect travel speeds. Highway designers strive to use the highest design speed as practicable for safety, mobility, and efficiency reasons.

The roadside clear zone is defined as the distance measured beyond the edge of the travel lane that should be clear of any non-traversable hazards or fixed-objects. Roadside hazards are described in general terms as any roadside feature that cannot be safely impacted by a run-off-the-road vehicle. A traversable slope is one that can be safely crossed by a vehicle leaving the roadway. Parallel slopes of 3:1 or flatter are considered to be traversable. A 3:1 slope means that the roadside decreases in height by one vertical unit of measure for every three horizontal units of measure away from the road's edge.

Clear zone distances are recommended as a guideline for providing a safe roadside area, based on the judgement of the road designer. Application of recommended clear zone distances should include consideration of design factors such as: context, boundaries, roadside cross-section, measurement, utility occupancy area, and highway design adjustments. The recommended clear zone distances vary according to the design speed, slope condition and traffic volumes of the proposed roadway.

PRINCIPAL DESIGN CONTROLS

US 2 passes through predominately flat terrain. MDT's "Road Design Manual" states that the appropriate design speeds for Rural Principal Arterials in level terrain is 110 km/h (70 mph).

Controlling geometric standards for the road design based on MDT's selected design speed are as follows (from *Figure 12-3: Geometric Design Criteria for Rural Principal Arterials* [*National Highway System-Non Interstate*] in MDT's "Road Design Manual"):

Level Terrain -- 110 km/h (70 mph)

- Minimum Radii = 500 m (1,640 feet)
- Maximum Gradients = 3%
- Passing Sight Distance = 750 m (2,460 feet)
- Desirable Stopping Sight Distance = 250 m (820 feet)
- Minimum Stopping Sight Distance = 180 m (590feet)

ROADWAY DEFICIENCIES AND ALIGNMENT IRREGULARITIES

Horizontal Alignment. The controlling geometric design criteria listed above were used to evaluate the existing road's horizontal alignment. Preliminary engineering analyses determined that the existing horizontal alignment of US 2 generally meets the criteria for a 100 km/h (60 mph) design speed. Three curves within the Dodson-East project area have radii of 582 m (1,910 feet), corresponding to a degree of curvature of 3°00'. The curve at the railroad overpass near the end of the project has a radius of 499 m (1,637 feet), corresponding to a degree of curvature of 3°30'. All four curves meet the minimum radii for either a 100 km/h (60 mph) or 110 km/h (70 mph) design.

Vertical Alignment. The existing vertical alignment of US 2 provides the minimum stopping sight distance for at least a 100 km/h (60 mph) design speed throughout the project. The maximum grade on the existing road within the project area is 3.01%.

Road Width. US 2 currently has a finished top surface width ranging from 7.9 to 9.1 m (26 to 30 feet) in rural portions of the Dodson-East corridor. Within Dodson, the existing highway is 12.0 m (40 feet) wide. The existing railroad overpass at the end of the project has a roadway width of only 7.3 m (24 feet).

According to MDT's NHS Route Segment Plan (see *Section 12* of MDT's "Road Design Manual"), the paved surface width of US 2 in the Dodson-East project area should be 12.0 m (40 feet) or greater. Only a short section of the existing roadway within Dodson complies with this design standard for roadway width on NHS routes. MDT's proposed new road would exceed the minimum roadway width standard.

Road Condition. Most of the existing highway within the project corridor has not received any major work except for maintenance activities since 1949. The BNSF Railway overpass was constructed in 1936 and has not received major improvements since that time. Therefore, although the existing roadway condition remains serviceable, much of the existing transportation facility has been in service for more than 50 years.

MDT maintains detailed information on the condition of the pavement surfaces on Montana's roadways and has developed a "ride index" to assess their relative condition. The Ride Index is based on a 0-100 scale with scores of 80 to 100 being "good"; 60 to 79.9 being "fair"; and 0-59.9 being "poor." The section of US 2 in the Dodson area has an overall rating of 79, suggesting the road condition is in generally fair condition.

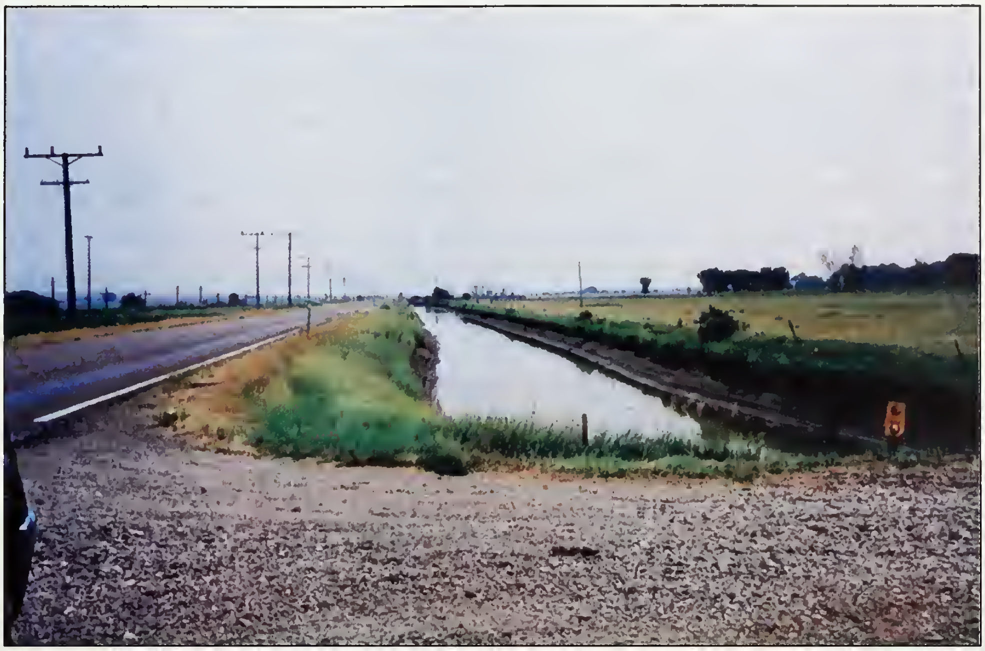
Roadside Slopes and Clear Zone. The existing roadway in the project area has no cut sections. Fill heights are generally less than 1.5 m (5 feet), with fill slopes of 10:1 in Dodson, 4:1 between RP 454.4 and 457.7, and 6:1 from RP 457.7 to 458.5. Based on MDT geometric design criteria for Rural Principal Arterials with design speeds of at least 100 km/h (60 mph), the existing 4:1 fill slopes in the project area are substandard. The proposed new highway would typically be designed with 6:1 fill slopes.

According to MDT's Preliminary Scoping Report for the Dodson-East project, the primary concern with the existing alignment is the inadequate clear zones along the south side of the highway between RP 454.8 and 456.7. This 2.3 km (1.4 mile) long segment of US 2 is parallel and adjacent to the Dodson North Canal. The edge of water in the canal through this area is only about 12.2 m (40 feet) right of the existing centerline. Additionally, the roadway centerline lies within 35 m (115 feet) of the centerline of the main BNSF Railway line and an overhead powerline (located between the road and the railroad) averages less than 11 m (about 35 feet) from the existing centerline of US 2 in the project area.

Associated clear zone distances for 6:1 fill slopes as shown on *Figure 14.2A* of MDT's Road Design Manual," would range be 8.5 m (27.9 feet) for 110 km/h (70 mph) design speed. As stated previously, the clear zone extends beyond the edge of the travel lane and such areas should not include any roadside feature that cannot be safely impacted by a vehicle leaving the roadway. Since the existing road in this section of the project corridor is only 7.9 m (26 feet wide), the edge of the existing travel lane for eastbound motorists is only about 8.6 m (28 feet) from the water in the Dodson North Canal and about 7.4 m (24 feet) from poles supporting the overhead power line that parallels the highway. These features are within the clear zone for the road.

PHOTO PLATE 3 shows the location of the Dodson North Canal and roadside power poles in relation to the existing roadway.

Intersections. Within the Town of Dodson, twelve approaches intersect with US 2, six on each side of the highway. The left leg of the Barrett Avenue intersection is poorly aligned creating a potential hazard. This intersection would be improved as part of the proposed project. Twelve other side road approaches intersect with US 2 in the rural area of the project corridor. Three of these approaches, located just west of the BNSF Railway overpass, create skewed intersections with the highway. Skewed intersections limit sight distance for motorists attempting to enter onto the highway. Such intersections need to be reconfigured to provide adequate sight distance.



The Dodson North Canal is located only 40 feet from the existing centerline of US 2. The canal lies within the required clear zone for the highway.

Photograph of the Dodson North Canal taken from a location just east of Dodson.

Photo Plate 3:
Dodson North Canal Photos

graph05

BRIDGE DEFICIENCIES

MDT periodically conducts detailed evaluations of the condition of bridges on the state highway system and on many off-system roads. The evaluations are used to develop a Sufficiency Rating to assess the condition of each bridge. The Sufficiency Rating is a composite of several ratings of individual bridge items that consider the structural condition and geometry of the bridge. A bridge with a low rating on structural items will be designated as "structurally deficient" and a bridge with a poor rating for geometry items will be designated as "functionally obsolete." Sufficiency Ratings are based on a 100-point scale.

Three bridges are located within the Dodson-East project limits. The locations, bridge types, date of construction, sizes, and MDT's current Sufficiency Ratings for these bridges are listed below in **TABLE 2**.

TABLE 2: Bridge Locations, Types, and Sufficiency Ratings US Highway 2 Near Dodson

Location (RP)	Bridge Length and Roadway Width	Structure Type	Date Built	Sufficiency Rating
Dodson Creek Overflow (RP 456.0)	17.68 m x 8.6 m (58 feet x 28.2 feet)	3-span timber	1949	48.1
Spring Coulee (RP 457.7)	17.68 m x 8.6 m (58 feet x 28.2 feet)	3-span timber	1949	65.8
BNSF Railway Overpass (RP 458.3)	56.69 m x 7.3 m (186 feet x 24 feet)	5-span, concrete	1936	33.0

None of the bridges within the project area are considered to be structurally deficient by MDT. However, none of the bridges meet the MDT's standard for roadway width (12.0 m or greater) on NHS Routes. The bridges at the Dodson Creek Overflow and at Spring Coulee crossings would be replaced with either new bridges or pipes as part of this project. The existing railroad overpass would also be replaced with a new structure, wide enough to accommodate the proposed roadway, along the chosen alignment.

C. Traffic Safety

1. Accident History of the Project Area

Accident summaries were reviewed to help understand the accident history of the project area during the October 1, 1991 through September 30, 2001 period. **TABLE 3** summarizes accident severity statistics for the project area during this recent 10-year-long analysis period.

As **TABLE 3** shows, the overall accident rate for the Dodson-East corridor was calculated to be 1.23 crashes per million vehicle miles of travel (MVMT) over the October 1, 1991 through September 30, 2001 period. This accident rate is slightly below the statewide average of 1.36 accidents/MVMT for all NHS Primary routes during the same general time period.

The severity index and severity rate are statistics commonly used by MDT as measures of the overall severity of accidents on a particular road segment or route based on the number and degree of injuries or fatalities recorded during a given period. The severity index is the ratio of the sum of fatal accidents and incapacitating injury accidents times 8 plus the number of other injury accidents times 3 plus the number of property damage accidents to the total number of accidents. The severity rate is calculated by multiplying the accident rate times the severity index.

TABLE 3: Accident Summary US Highway 2 Near Dodson (1991-2001)	
Total Number of Accidents	23
Number of Fatal Accidents **(# fatalities)**	0 (0)
Number of Injury Accidents **(# injuries)**	5 (8)
Number of Property Damage Only (PDO) Accidents	18
Accident Rate (All Vehicles)	1.23
Severity Rate	2.57
Severity Index	2.09

The accident severity rate over the ten-year analysis period for the Dodson-East project area was determined to be 2.57. This figure compares to a statewide average severity rate of 3.20 for all NHS Primary roads. The accident severity index for the US 2 project area was calculated to be 2.09 for the same period as compared to the average severity index of 2.35 for all NHS Primary roads in Montana. This data shows that the severity of the accidents that occurred on US 2 within the Dodson-East corridor was somewhat less than for other similar routes in the state.

A review of the characteristics of motor vehicle accidents occurring within the Dodson-East project area during the 10-year study period identified the following variations from average statewide occurrences:

- 68.8% off road/right shoulder accidents vs. 30.3% statewide.
- 39.1% snow, slush, and icy road accidents vs. 24.8% statewide.
- 43.5% dark-not lighted accidents vs. 32.4% statewide.
- 13.1% dawn/dusk accidents vs. 5.9% statewide.

The accident analysis also helped identify other key contributing factors to the crashes that occurred within the project area over the 10-year study period. These contributing factors are listed below.

- Alcohol was a factor in 2 out of the 23 reported accidents.
- Six of the reported accidents were collisions with deer or domestic animals.
- Drivers were asleep or inattentive in seven of the reported accidents.

No accident clusters or other high hazard locations have been identified in the project area. The road widening, slope flattening, delineation and alignment changes proposed with this project should benefit traffic safety on this section of US 2.

D. Overall Conclusions on Need

Although US 2 in the Dodson-East project area does not possess a notable history of frequent or severe motor vehicle accidents, the existing facility has physical deficiencies or roadside conditions that contribute to reduced safety for highway users. Some deficiencies like the road's substandard width and presences of clear zone obstructions are related to the design of the roadway and can be corrected only by reconstruction.

Rebuilding US 2 in the Dodson-East project area would improve safety for all highway users by bringing the design of the highway into compliance with MDT's current design standards for Rural Principal Arterials with design speeds of 110 km/h (70 mph). The width of the roadway's surface within the project area would be increased to the 12.0 m (40 feet) or greater minimum paved roadway width standard established for this NHS route in MDT's Route Segment Plan. The proposed alignment modifications between RP 454.8 and 456.7 would eliminate the roadside safety hazard posed by the adjacent Dodson North Canal.

III. Alternatives Considered

III. Alternatives Considered

A. Introduction

This Part describes the alternatives considered to address the transportation and other needs identified in Part II. Alternatives to the proposed action are the various activities to be undertaken to meet the purpose and the need for (or the reasons for undertaking) the project. This section describes the proposed improvements that comprise the Preferred Alternative. The "Preferred Alternative" includes the action(s) which MDT believes would best meet the purpose and need for the project, giving consideration to economic, environmental, technical and other factors. This Part also describes the range of alternatives initially considered for the proposed action and discloses reasons for the rejection of other possible actions.

B. No Action Alternative

The No Action alternative (also known as the "no build" alternative) involves no major work to improve or correct existing deficiencies on US 2 within the Dodson-East project area. This alternative would not alter the alignment or improve the general condition of the existing roadway or bridges. However, these transportation facilities would continue to receive the minor actions needed to maintain them in acceptable condition for public use. The traffic safety and geometric deficiencies that currently exist would continue. The No Action alternative would not impact adjacent land uses, modify access from US 2 to adjoining lands, or change the appearance of the highway corridor.

The No Action alternative does not meet the purpose and need for the project and has been rejected from further consideration. However, the No Action alternative provides a baseline against which the Preferred Alternative (or other alternatives) can be compared. The environmental effects of the No Action alternative will be discussed in Part IV as a means of comparing and contrasting the impacts of MDT's Preferred Alternative.

C. Preferred Alternative

1. OVERVIEW

The Preferred Alternative is to completely reconstruct about 7.2 km (4.5 miles) of US 2 immediately east of Dodson. US 2 would be rebuilt as a safe and efficient two-lane highway on an alignment near, but offset, from the existing highway. The road's design, particularly its paved surface width, would be substantially improved over that of the existing facility.

Montana highways and bridges are designed to meet or exceed recommended minimum geometric standards. These geometric standards are based on design policies and guidelines established by MDT and AASHTO. The design for the new transportation facilities would be developed to conform to MDT's "Road Design Manual" and "Bridge Design Standards" and AASHTO's Standard Specifications.

Site preparation work would include clearing, and grading. Much of the existing road's structure would be incorporated into the new highway facility. Adequately sized drainage pipes beneath approaches joining US 2 and roadside ditches would accommodate and convey runoff from the roadway. New fences would be installed throughout the project corridor.

Advisory and regulatory signs would be installed according to standards outlined in the *Manual on Uniform Traffic Control Devices* (MUTCD).

Due to the proposed alignment shift for US 2, the existing roadway and bridges would remain in service during construction, minimizing the cost of traffic control and inconveniences for highway users during construction. Appropriate signing and flagging would be used to ensure traffic safety during construction of the project.

2. DESIGN SPEED/POSTED SPEED LIMITS

Horizontal and vertical alignments as well as all other design features for US 2 in the Dodson-East project area would be designed to meet the requirements for a design speed of 110 km/hr. This design speed is consistent with standards for principal arterial routes in level terrain as outlined in MDT's "Road Design Manual."

Current posted speed limits on US 2 in the Dodson-East project area would remain unchanged with the Preferred Alternative.

3. TYPICAL ROAD CROSS-SECTIONS

The proposed typical road cross-sections for the Preferred Alternative are presented in **FIGURE 3**. Within Dodson, the Preferred Alternative would rebuild US 2 to a 12.0 m (39.3-foot) wide finished surface accommodating two 3.6 m (11.8 foot) wide driving lanes and two 2.4 m (7.9 feet) wide shoulders. As suggested by the Town Council at a previous project meeting, a 1.5 m (5 feet) wide sidewalk would be built only along the south side of the highway in Dodson. A new 12.8 m (42.0 feet) wide paved surface would be provided throughout the remainder of the project corridor. US 2 outside of Dodson would have two 3.6 m (11.8 foot) wide driving lanes and two 2.8 m (9.2 foot) wide shoulders. This increased road width would allow for a future pavement overlay.

The reconstructed highway would be constructed with a plant mix bituminous (asphalt) surface over the top of a crushed gravel base course. The pavement of the new road would be designed to last at least 20 years. Roadside slopes would be designed and built to adhere with standards outlined in MDT's "Road Design Manual."

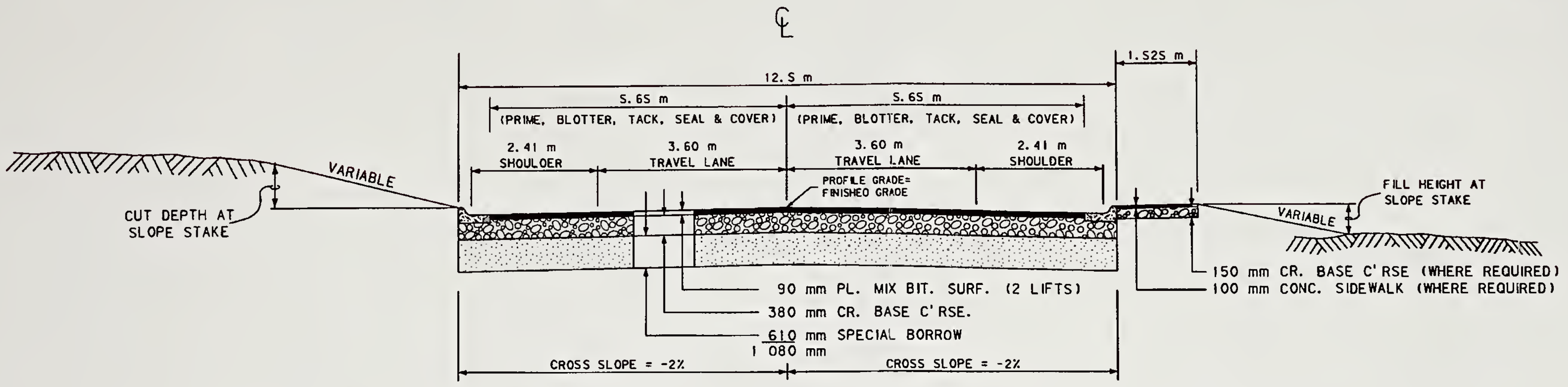
4. HORIZONTAL AND VERTICAL ALIGNMENTS

The proposed improvements would typically be accomplished following a new horizontal

STATE	PROJECT NUMBER	SHEET NO.
MONTANA	F 1-8(15)454	7

TYPICAL SECTION NO. 1

STA. 4+47.72 TO 8+60.00


℄
12.5 m
1.525 m
5.65 m
(PRIME, BLOTTER, TACK, SEAL & COVER)
5.65 m
(PRIME, BLOTTER, TACK, SEAL & COVER)
2.41 m SHOULDER
3.60 m TRAVEL LANE
3.60 m TRAVEL LANE
2.41 m SHOULDER
PROFILE GRADE= FINISHED GRADE
VARIABLE
CUT DEPTH AT SLOPE STAKE
FILL HEIGHT AT SLOPE STAKE
VARIABLE
150 mm CR. BASE C'RSE (WHERE REQUIRED)
100 mm CONC. SIDEWALK (WHERE REQUIRED)
90 mm PL. MIX BIT. SURF. (2 LIFTS)
380 mm CR. BASE C'RSE.
610 mm SPECIAL BORROW
1 080 mm
CROSS SLOPE = -2%
CROSS SLOPE = -2%

QUANTITIES												
UNIT	AGGREGATE						UNIT	BITUMINOUS MATERIAL				
	COVER	PLANT MIX	BLOTTER MATERIAL		CR. BASE COURSE	SPECIAL BORROW		ASPHALT CEMENT	PRIME	SEAL	TACK	
AREA square meters		1.017			4.678	7.625	square meters PER STATION		1 130	1 130	1 130	
cubic meters PER STATION		101.7			467.8	962.5	tons PER STATION	13.96	1.61	1.82		
tons PER STATION	15.8	232.6	6.0				liters PER STATION				260	

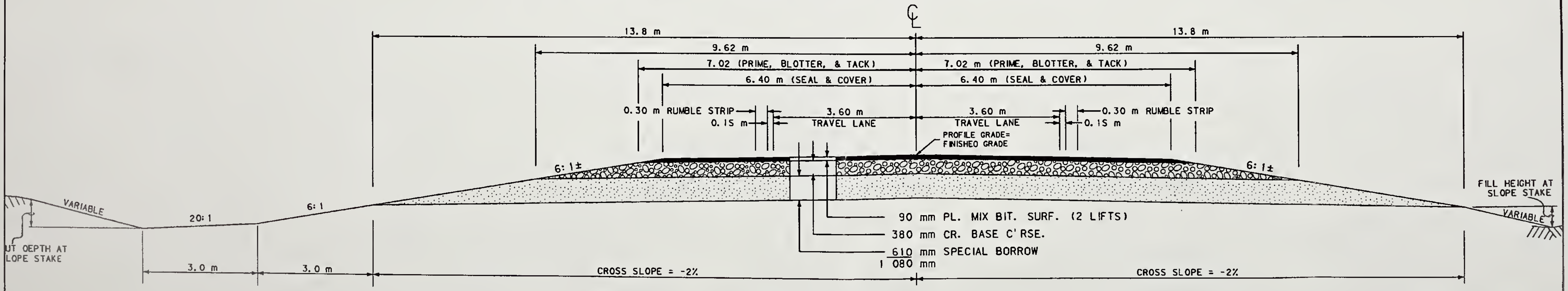
BASED ON R - VALUE = 30

FILL SLOPES	
0 - 3 m	6:1
3 - 6 m	4:1
6 - 9 m	3:1
OVER 9 m	2:1

BACK SLOPES	
0 - 1.5 m	5:1
1.5 - 3 m	4:1
3 - 4.5 m	3:1
4.5 - 6 m	2:1
OVER 6 m	1.5:1

TYPICAL SECTION NO. 2

STA. 8+60.00 TO 60+62.75
STA. 60+62.75 TO 61+60.25 TRANS. TYP. NO. 2 TO TYP. NO. 3
STA. 75+63.34 TO 75+88.94



QUANTITIES												
UNIT	AGGREGATE						UNIT	BITUMINOUS MATERIAL				
	COVER	PLANT MIX	BLOTTER MATERIAL		CR. BASE COURSE	SPECIAL BORROW		ASPHALT CEMENT	PRIME	SEAL	TACK	
AREA square meters		1.208			6.324	14.286	square meters PER STATION		1 404	1 280	1 342	
cubic meters PER STATION		120.8			632.4	1 428.6	tons PER STATION	16.58	2.00	2.06		
tons PER STATION	17.9	276.3	6.0				liters PER STATION				309	

BASED ON

PF

graph07

Figure 3: Dodson - East Typical Sections

alignment located south of the existing Dodson North Canal. The new road would diverge from the existing alignment 0.6 km (0.4 miles) east of the project's beginning in Dodson (at about RP 454.5) and continue south of the Canal and US 2 before crossing the existing highway near RP 457.9. The new road would then be on the north side of US 2 before rejoining the existing roadway at the end of the project (RP 458.3).

The proposed alignment would eliminate the existing reverse curve at RP 454.5 just east of Dodson and would improve the horizontal alignment at the BNSF Railway overpass near the end of the project. It would also provide a relatively hazard-free clear zone along the new roadway. The new roadway centerline would typically be more than 40 m (130 feet) south of the canal.

FIGURE 4 shows the proposed alignment change for this section of US 2.

The vertical alignment of the new road would be designed to provide the desirable stopping sight distance for a design speed of 110 km/h (70 mph). Maximum grades would be less than 1.8% throughout the project.

5. BRIDGES AND CULVERTS/DRAINAGE

Within the project area, US 2 crosses the Dodson Creek Overflow (RP 456.0), Spring Coulee (RP 457.7), and a few minor unnamed drainages. All of these constructed or natural conveyances are intermittent or ephemeral. New bridges may be constructed at the Dodson Creek Overflow and Spring Coulee, while new culverts are proposed at all other drainage crossings. As discussed in the following section, the Preferred Alternative would also require two new bridges across the Dodson North Canal.

A storm drainage system along US 2 within Dodson is not proposed as part of the Preferred Alternative. However, the new road would be designed and graded so that surface runoff drains to valley gutters along the curb and outfalls into the Dodson Creek overflow.

6. IRRIGATION CANAL CROSSINGS/FACILITIES

Reconstruction of US 2 along the proposed alignment would require two new bridges across the Dodson North Canal, as well as side road access across the canal at two locations. Since the BUREAU OF RECLAMATION prefers that bridges be used if the affected ditch carries more than 100 cubic feet per second (cfs), the new crossings of the Dodson North Canal would likely be bridges designed to span the entire width of the canal.

MDT would also install siphons beneath the new road at appropriate locations to ensure that water from the Dodson North Canal continues to be transported to lands south of the new highway. MDT would coordinate the locations and design of the siphons with the BUREAU OF RECLAMATION and affected landowners.

MDT proposes to undertake minor work at the existing crossing for the Dodson Creek Overflow in Dodson located just west of the project's beginning. MDT would clear and grade this overflow ditch as part of this project since the ditch would receive the majority of runoff from the highway through town and the present channel is poorly defined and choked with vegetation. On the south side of the roadway within Dodson, valley gutters would be used to direct runoff toward the overflow ditch.

7. INTERSECTIONS AND APPROACHES

Public and private approaches would be designed and reconstructed to fit local conditions and in a manner that would ensure safe entry and exit from the highway. Approaches would typically be aligned to intersect the roadway at angles between 75- and 90-degrees to provide adequate sight distance. MDT proposes to pave public and private approaches to the right-of-way limit. Farm field approaches (those approaches that provide access only to pasture or farmland) would generally receive a 3.6 m (12 feet) wide paved strip and gravel surfacing to the new right-of-way line. All slopes for approaches would be designed to current MDT standards.

The north approach to US 2 at Barrett Avenue in Dodson would be modified to provide a more standard intersection configuration with a developed approach. Currently, vehicles are able to leave the road and enter roadside areas anywhere along the north side of US 2 at Barrett Avenue.

D. Build Alternatives Considered But Rejected

MDT has not identified any other designs for the highway but has considered several alternate alignments for US 2 in the Dodson-East project area. MDT's Preliminary Scoping Report for the project (September 6, 1990) discussed three alternate alignments including: 1) an alternate that would shift US 2 slightly north but closely matching existing alignment; 2) an alternate that would place the highway south of the Dodson North Canal; and 3) an alternate that would locate US 2 north of the BNSF Railway through the project area. These alternate alignments plus one additional alternate, shifting US 2 southward and reconstructing a portion of the Dodson North Canal, were presented to the public at a November 1998 meeting in Dodson. The alignment options and reasons why MDT dropped the actions from consideration during the course of project development are discussed below.

1. REBUILD US 2 SLIGHTLY NORTH OF ITS EXISTING ALIGNMENT

This alternate involved a slight shift in the road's location and would have produced a new road that would closely match the alignment of the existing highway. The alignment shift could be accomplished primarily within the existing right-of-way and offered MDT the opportunity to provide an adequate clear zone between the road and the Dodson North Canal.

However, the alternate would require the relocation of the existing overhead power line that parallels US 2 at this location and would place the highway closer to the BNSF Railway. Shifting the highway toward the BNSF Railway creates concerns over safety due to the decreased distance between the highway and railroad. The BNSF Railway advocates maintaining a minimum distance of 15.2 m (50 feet) between the centerline of the main track and the adjacent highway right-of-way. Meeting this minimum offset distance would not be possible with this alignment alternate.

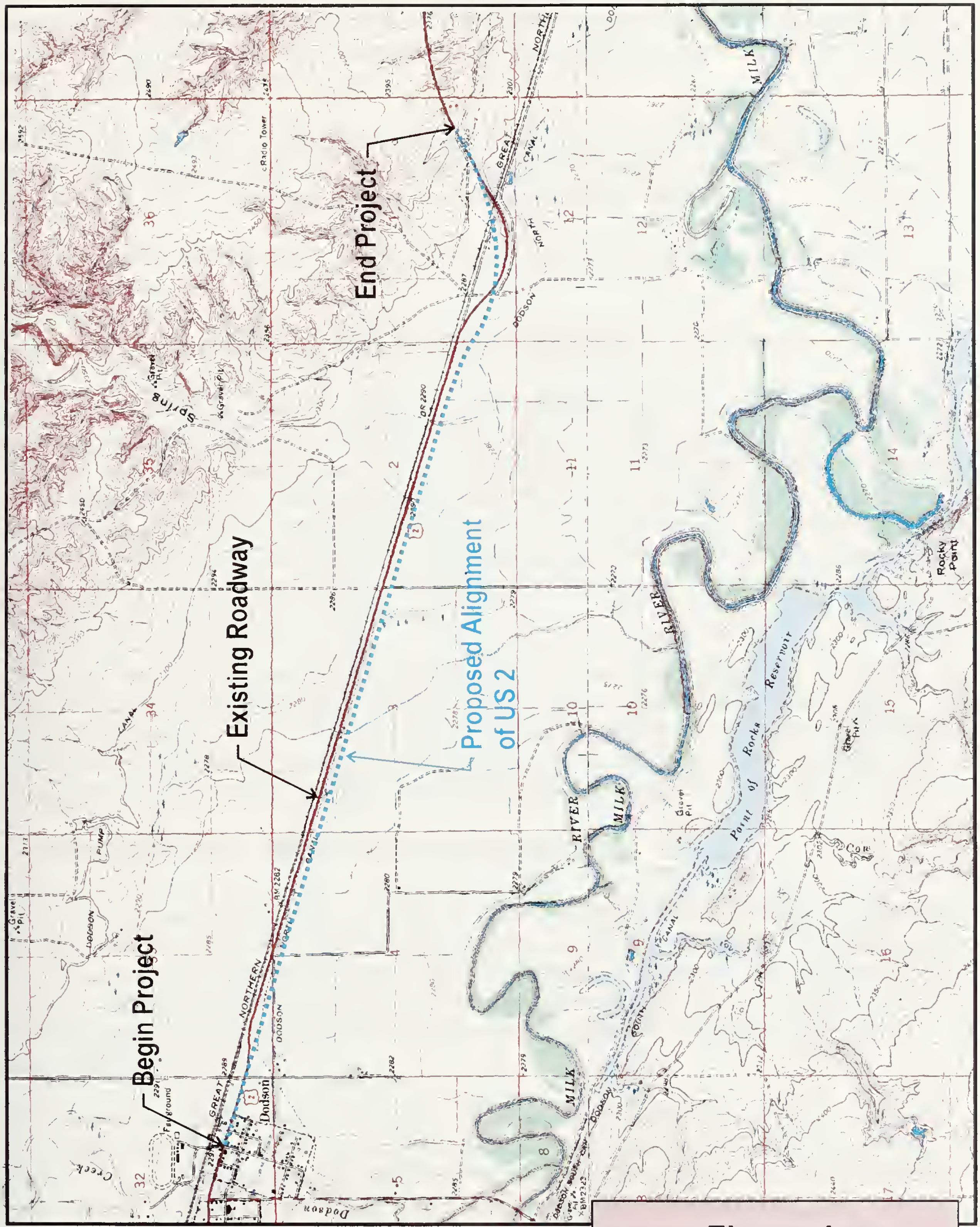


Figure 4: Proposed Alignment of US 2

graph08

Although an adequate clear zone between the highway and the canal could be provided with this alternative, the area available to make slope and drainage improvements between the highway and the canal is limited. Guardrail would be necessary along the 2.3 km (1.4 mile) long section of US 2 that parallels the irrigation canal.

Traffic control for this alternative would also be difficult, especially at bridge replacement locations. The presence of wetlands and the relatively short distance between the highway and the railroad and canal, limit the locations for detours during construction.

For these reasons, MDT rejected the alternative of reconstructing the roadway just north of its present alignment.

2. SHIFT US 2 NORTH OF THE BNSF RAILWAY

Reconstructing US 2 on a new location north of the BNSF Railway was another alignment alternate considered but rejected by MDT. To accomplish this, a new railroad overpass would need to be built just east of Dodson. The roadway could then be developed parallel to the railroad for the entire length of the project and tie into the existing road at about RP 458.5. This alternative would eliminate two horizontal curves and could be designed to provide a hazard-free clear zone. New right-of-way would be required but no new crossings of the Dodson North Canal or utility relocations would be needed. The existing road could be utilized as a detour during construction, minimizing traffic control costs.

MDT eliminated this alternate from consideration due to concerns over the ability to provide adequate clearance over the BNSF Railway at a new overpass location east of Dodson (at approximately RP 454.7). Because of the required vertical clearance over the railroad, it would be difficult to provide a new road with a vertical alignment compatible with existing roadside development in Dodson and with adequate stopping sight distance at the new crossing.

3. RECONSTRUCT US 2 TO BYPASS DODSON

MDT also considered the option of shifting the alignment of the highway to bench lands north of the railroad and Dodson. US 2 could be developed on a totally new alignment beginning about 4 km (2.5 miles) west of Dodson and bypassing the community to the north. This option would also require a new bridge crossing of the railroad somewhere west of Dodson. This option would extend the project length by about 6 km (3.7 miles) and significantly increase the cost of this proposed project.

MDT rejected this alternate due to the substantial increase in project length (and related costs) of the facility and the potential for creating environmental impacts greater than those associated with other proposed alignment alternates. When MDT presented this option at a public meeting in November 1998, residents of Dodson were adamantly generally opposed to this idea. The principal concerns of residents related to the potential for adverse economic impacts to the community, access to US 2, and impacts to landowners west of town.

4. SHIFT US 2 SOUTH AND REBUILD DODSON NORTH CANAL

MDT presented another alignment alternate at its November 1998 public meeting that would place the new the road slightly south of the existing highway and relocate about 2.2 km (1.4 miles) of the Dodson North Canal. The roadway would maintain its present alignment through the community of Dodson. East of the community, the road's location would be shifted southerly and partially developed over lands presently occupied by the canal. This alignment would not require bridges across the Dodson North Canal. A new railroad overpass would be required at the east end of the project.

MDT rejected this option primarily because of the high cost associated with relocating the Dodson North Canal, which has been used to convey water since about 1915. Relocation of the canal would require approval from the BUREAU OF RECLAMATION and the agency was initially contacted about performing the necessary design work. The Bureau estimated that the cost of relocating the canal would approach $1 million. MDT determined that the associated cost of building new structures across the canal would be less than relocating the canal.

MDT was also concerned that building the highway over the area annually saturated by the canal could result in future maintenance problems due to unstable soil conditions beneath the road.

IV. Environmental Impacts and Mitigating Measures

IV. Environmental Impacts and Mitigating Measures

A. Introduction

This Part describes the social, economic, and environmental conditions and resources affected by the proposed Dodson-East reconstruction project. Notable environmental conditions and important resources likely to be affected were identified through agency contacts, literature reviews, research and field studies and public involvement activities.

This Part also discusses the potential effects of implementing the Preferred Alternative and of taking no action to improve US 2 east of Dodson. As indicated in Part III, the "Preferred Alternative" refers to the specific activities associated with the proposed Dodson-East project between RP 454.1 and RP 458.6. MDT does not consider the No Build Alternative as viable because it fails to meet the purpose and need for the project. However, the impacts of this alternative are being analyzed for the purposes of providing a contrast or comparison with the Preferred Alternative. Only the impacts with a reasonable possibility for individual or cumulative impacts are assessed in this Part of the Environmental Assessment.

Where appropriate, measures to mitigate the adverse environmental impacts of this project are discussed at the end of each section. If the Preferred Alternative is advanced, then MDT will implement the mitigating measures identified in this Part.

B. Impacts to the Natural Environment

1. IMPACTS TO LANDFORMS, GEOLOGY AND SOILS

Existing Conditions. The Dodson-East project area lies within the northern portion of the Great Plains Physiographic Province of the United States and is characterized by flat plains and gently rolling hills. The project area lies within what is now the Milk River Valley. However, it generally believed that the Missouri River once occupied what is now the broad valley of the lower Milk River.

Surface elevations in project area range from approximately 693 m to 710 m (2,275 to 2,330 feet), increasing toward the east end of the project. The rolling prairie to the north and south is 61 m to 91 m (200 to 300 feet) higher in elevation. Dodson Creek and Spring Coulee are the main streams draining the Dodson-East project area. Both drainages flow generally southward, and are tributaries of the Milk River that eventually joins the Missouri River east of Glasgow. The Milk River follows a widely meandering path, generally paralleling US 2 approximately 1.6 km (1 mile) to the south of the roadway in the Dodson area.

The geology of the project area is the product of cycles of continental uplift, erosion and deposition, glacial action, and climate. Surface materials in this part of Phillips County were crushed, mixed, and deposited as glacial till during the retreat of glaciers during the last ice age. Over time, this material has been eroded and modified by wind and water.

Bedrock in this part of northern Montana is mostly sandstone and shale formations. Rock outcrops are rare along this portion of US 2 because the road follows the Milk River Valley and the sedimentary base rocks are easily eroded.

IMPACTS OF THE PREFERRED ALTERNATIVE. The proposed project involves building a segment of highway across terrain and landforms located either north or south of the present road. Between RP 455.3 and RP 457.9, the new road would be south of the existing highway. Over much of this 5.2 km (3.23 mile) long section of the project, the new centerline for US 2 would be about 62 m (200 feet) south of the existing centerline. The new road crosses the existing highway at about RP 458.0 and remains north of the road until proposed alignment transitions back to the existing highway alignment at the end of the project. At its furthest, the new road would be about 85 m (nearly 280 feet) north of the present highway.

Shifting the road's location and constructing a wider roadway would disrupt, displace, compact, and cover soils not currently associated with the existing highway. Over most of the project's length, fill must be placed to elevate the new road above the existing terrain and to build approaches to a new structure allowing US 2 to cross over the BNSF Railway near the east end of the project. Since the construction of this segment of US 2 requires few new road cuts, fill material must be obtained from borrow sources in the area and transported to the project site. Surface and subsurface materials would also be disturbed at borrow site locations away from the project area. Borrow material that must be imported to construct highway projects would typically be provided by MDT's contractors.

To stabilize slopes and to minimize the visual effects of new road construction, slopes would be rounded and revegetated to blend with the adjoining lands. The presently traveled way (PTW) would be obliterated where it cannot be incorporated into the foundation of the new roadway. The ground would be contoured to match existing terrain in areas where the old road is obliterated.

The construction activities, including clearing and grading, would increase the short-term and long-term potential for soil erosion and sediment transport. This potential for erosion and adverse sedimentation impacts would vary depending upon the amount of soil area disturbed, the nature of the soils disturbed, the steepness of slopes, the proximity of the disturbance to wetlands and surface waters, and the duration of the soil disturbance.

Erosion Control Plans would be designed for each proposed project and they would be submitted to the MDEQ Permitting and Compliance Division in accordance with their Montana Pollutant Discharge Elimination System Regulations (ARM 16.20.1314). Best Management Practices, including temporary and long-term erosion control measures, would be considered in the design of these Plans. Such practices may include the use of lined channels, silt fences, ditch blocks, mulch, slope protection and other commonly accepted control measures. The Plans would be developed using Guidelines established in MDT's "Highway Construction Standard Erosion Control Workplan" whose main objective is to minimize erosion of disturbed areas during and after construction of these proposed projects.

In accordance with **7-22-2152** and **60-2-208, M.C.A.**, MDT would also reestablish a permanent desirable vegetation community along all areas disturbed by the proposed highway construction. MDT would develop a set of revegetation guidelines that must be followed by the contractor.

CUMULATIVE IMPACTS. The cumulative impacts of this project when added to all other known projects would not cause any notable effects on the topography, geologic conditions or soils. Projects considered in making this conclusion are discussed later in this Part under **Section 13. Other Secondary and Cumulative Effects**.

IMPACTS OF THE NO ACTION ALTERNATIVE. MDT's maintenance actions could cause localized and minor disturbances to surface or subsurface materials within the Dodson-East project area.

Mitigating Measures (Geology and Soils)

The following measures will be implemented to minimize project-related effects on the local topography and geological conditions.

- *To stabilize slopes and to minimize the visual effects of highway construction, roadside slopes will be rounded and disturbed areas will be revegetated as soon as practicable.*
- *An Erosion Control Plan employing Best Management Practices for controlling erosion and sediment transport will be implemented in the project area.*

2. IMPACTS TO IMPORTANT FARMLAND

Existing Conditions. The U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE (NRCS), Malta Field Office was contacted during March 2000 to identify important farmland that may be affected by the proposed reconstruction of US 2 east of Dodson. The *FARMLAND POLICY PROTECTION ACT* (FPPA) (**7 U.S.C. 4201 et. seq.**) requires special consideration be given to soils that considered as prime farmland, unique farmland, or farmland of statewide or local importance by the NRCS. For the purposes of this EA, soils meeting these designations are considered together and identified as "Important Farmland."

The NRCS District Conservationist provided a map of soils within the project area and indicated that none of the soils affected by the Dodson-East project are considered to be prime farmland. However, additional coordination and research showed that four soils crossed by the proposed project are considered to be farmland of statewide importance in Phillips County.

The following soils (listed by soil number and name) within the Dodson-East project corridor are therefore identified as " Important Farmland" and subject to the FPPA:

60A	**Havre loam** (0-2% slopes)
90 A	**Harlake clay** (0-2% slopes)
563C	**Scobey-Kevin clay loams** (2-8% slopes)
603A	**Havre clay** (0-2% slopes)

IMPACTS OF THE PREFERRED ALTERNATIVE. Of importance under the FPPA are the areas of direct and indirect conversion of Important Farmland. Direct conversions occur when soils meeting the definition of farmland are included in the proposed highway right-of-way. Indirect conversions of farmland occur when the areas remaining in a tract of land partially taken for right-of-way: 1) would no longer be capable of being farmed due to access restrictions; or (2) would likely be converted to a non-farm use due to the accessibility of the highway.

The soils maps provided by the NRCS and preliminary right-of-way plans for the proposed improvements were reviewed to determine the area of Important Farmland that would be affected by the Dodson-East project. Based on the information presented above, the construction of the proposed project would directly convert about 30.5 hectares (ha), or 75.5 acres, of soils meeting the designation of Important Farmland. The proposed project would not indirectly convert any Important Farmland.

A Farmland Conservation Impact Rating form (#AD-1006) was processed for the proposed highway improvement project in accordance with the FPPA. The NRCS was contacted in October 2002 to complete Parts II, IV, or V of the form and processing of the form has not yet been completed. The form submitted to the NRCS is provided in **APPENDIX B**.

CUMULATIVE IMPACTS. The Preferred Alternative, together with any other ongoing or future development activities on rural lands within Phillips County, would convert minor amounts of farmland to other uses. Over time, such cumulative conversions could represent a notable loss of Important Farmland in the county. Residential and commercial development in Phillips County has not and is not presently occurring at a rapid pace. Reconstructing a relatively short portion of US 2 would not be expected to either accelerate or deter the conversion of Important Farmland in the county.

IMPACTS OF THE NO ACTION ALTERNATIVE. The No Action Alternative would not directly or indirectly convert any additional Important Farmland in the Dodson-East project area.

3. IMPACTS TO WATER RESOURCES AND QUALITY

Existing Conditions - Surface Water. Current sources of water in the project area are ephemeral creeks, marshy ground, and irrigation ditches. The project area has an extensive surface drainage network characteristic of plains and foothills topography. Major streams generally flow in a south to southeast direction and are tributaries to the Milk River.

The Dodson Creek Overflow (RP 456.0), Dodson Pump Canal (RP 457.3), Spring Coulee Creek

(RP 457.7), and a few minor unnamed drainages are crossed by US 2 and would be crossed by the proposed alignment. The Dodson North Canal parallels the highway to the south between RP 455.0 and RP 456.6. All of these constructed or natural conveyances are intermittent or ephemeral. **FIGURE 5** shows these surface waters and constructed water conveyances in the project area.

The MDEQ considers surface waters in major streams and their tributaries in the project area to be "B-3" Class waters. B-3 (along with A-1, B-1 and B-2) waters are suitable for drinking, culinary and food processing purposes after conventional treatment for bathing, swimming and recreation. B-3 waters are for propagation of non-salmonid fishes. All of these classes must support associated aquatic life, waterfowl, and furbearers; and agriculture and industrial water supply.

The MDEQ has the responsibility under *Section 401* of the federal *Clean Water Act* (**33 U.S.C. 1251 – 1376**) and the *Montana Water Quality Act* (**75-5-101 M.C.A.**, *et seq.*) to monitor and assess the quality of Montana surface waters and to identify impaired or threatened stream segments and lakes. The MDEQ sets limits, known as Total Maximum Daily Loads (TMDLs), for each pollutant entering a body of water. TMDLs are established for streams or lakes that fail to meet certain standards for water quality, and describe the amount of each pollutant a waterbody can receive without violating water quality standards. The legislatively mandated TMDL process determines the concentration of pollutants in waterbodies and stipulates controls needed to improve water quality in order to support designated uses.

The MDEQ has identified waterbodies (i.e., streams or lakes) that do not fully meet water quality standards and support the appropriate beneficial uses (such as recreation, aquatic life, fisheries, water supply, agriculture and industrial use), or that are fully supporting their uses as stipulated in the standards but are threatened. Such streams or lakes are referred to as "water quality limited" and are in need of TMDL development.

Every two years, the MDEQ prepares and submits a list of these impaired or threatened waters to the EPA as required under *Section 303(d)* of the *Clean Water Act*. The MDEQ released its Final Year 2000 Montana *303(d)* List on November 24, 2000. The Milk River in the project area is on MDEQ's list of waters that do not meet state water quality standards (*2000 Waterbodies in Need of TMDL Development*). Since the Milk River is located nearly 1.6 km (1 mile) from US 2, the proposed highway reconstruction project would not affect this surface water.

Existing Conditions - Groundwater. The occurrence, movement, and quality of groundwater in the project area are closely tied to the surrounding geological conditions. The sandstone layers of the Eagle Formation is the most widely used bedrock aquifer in the county and is a primary source for domestic and stock water. The alluvium found along streams and glacial deposits are other principal sources of groundwater for domestic use and stock watering purposes. Groundwater information from the Bureau of Mines and Geology shows that the domestic and stock water wells in the Dodson area typically drilled to depths ranging from 10 to 30 m (30 to 105 feet). Domestically used groundwater from these formations is typically of fair to poor quality.

IMPACTS OF THE PREFERRED ALTERNATIVE ON SURFACE WATERS. Erosion and sedimentation during construction and surface runoff after construction are the principal ways that surface water and its quality could be affected by the proposed highway reconstruction project. Unless preventative measures are taken, erosion and sedimentation and highway runoff have the potential to affect water quality and aquatic resources. Since the Milk River is listed as "water quality limited" by the MDEQ and surface waters in the project area are tributaries to the river, it is important that impacts to this resource be minimized.

Vegetation clearing and grading associated with building the realigned highway and a new railroad overpass would increase the potential for soil erosion and sediment transport to occur unless control measures are implemented. Although erosion occurs naturally to some extent, the erosion of areas disturbed by the construction represent a source for additional sediment contributions to local surface waters. Increased sediment loads, particularly for a long duration, may alter downstream deposition patterns, cause water temperatures and turbidity levels of the water to rise, increase the level of nutrients (nitrates and phosphorus), decrease the quality of existing fisheries, and promote algal growth.

Surface water resources in the project area are comprised of ephemeral creeks, marshy ground, and irrigation ditches. The proposed project would construct new bridges or install new pipes at the locations where the new highway crosses the Dodson Creek Overflow and Spring Coulee Creek. Two new structures would be necessary to cross the Dodson North Canal. Since the streams and irrigation canal(s) crossed by US 2 are ephemeral, it would be possible to schedule construction of so it does not occur in flowing water. MDT has not yet developed preliminary designs for the new bridges associated with this project. However, the new structures would likely be designed to completely span the existing stream channels and irrigation canal. Because MDT's Erosion Control Plan would also be implemented to control erosion and sediment transport during and after construction, the implementation of the Dodson-East project would not cause notable adverse effects on surface water quality.

Potential water quality impacts can also occur due to highway runoff during the operational life of the road improvement projects. The primary constituents in highway runoff include suspended sediments (pavement wear and dirt), lead (gasoline, tire filler), zinc (tire filler, motor oil stabilizers), copper (metal platings, brake linings), and petroleum (gasoline, antifreeze, hydraulic fluids). Impervious road surfaces produce runoff amounts proportional to the pavement area. Rural roadways with gravel shoulders and ditches tend to slow runoff through absorption into adjacent vegetation and soils.

During the mid-1980s, the FHWA conducted extensive nationwide studies to determine highway runoff constituents, amounts relative to roadway types and traffic conditions, and the potential impacts to surface water resources *(Pollutant Loadings and Impacts from Highway Stormwater Runoff, Volume* I, FHWA, April 1990). FHWA's research concluded that pollutants in highway runoff are not present in amounts sufficient to threaten surface or groundwater where Average Daily Traffic (ADT) volumes are below 30,000. Since traffic volumes in the Dodson-East area are not expected to exceed 1,500 vehicles per day in the foreseeable future, it can be reasonably concluded that runoff from the highway would not cause significant degradation of surface or groundwater in the project areas.

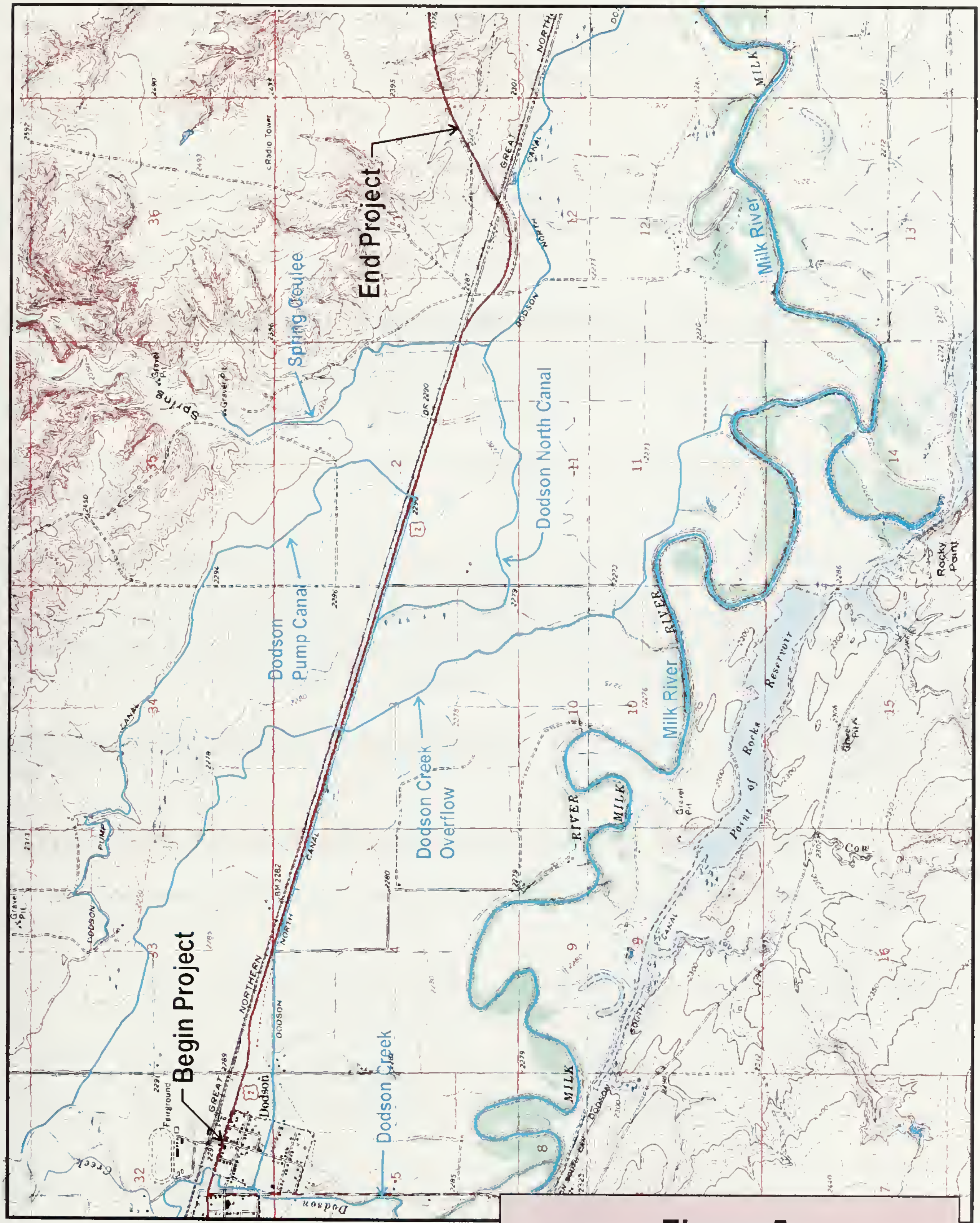


Figure 5:
Surface Waters and Canals Dodson-East Project Area

graph09

Work in or near streams in the project areas would require *124SPA* Stream Protection Permits from the MONTANA DEPARTMENT OF FISH, WILDLIFE & PARKS (MDFWP). Likewise, the placement of any fill material in surface waters or wetlands would be subject to the issuance of *Section 404* permits by the U.S. ARMY CORPS OF ENGINEERS (COE). These and other permit requirements are discussed at the end of Part IV.

Because the area of soil disturbance for each project would exceed 2.0 ha (5.0 acres), a National Pollutant Discharge Elimination System (NPDES) storm water permit administered by the MDEQ would be required. MDT would develop storm water pollution prevention plans for the Dodson-East project to meet the permit requirements.

IMPACTS OF THE PREFERRED ALTERNATIVE ON GROUNDWATER. Groundwater hydrology in the project area would be unaffected by the proposed highway improvements since little excavation would be required to construct the new road. The required road cuts for this project would not expose or affect the groundwater table.

The proposed project would have no direct adverse impacts to groundwater or public drinking water supplies.

CUMULATIVE IMPACTS. The proposed US 2 improvements, together with the impacts of present and reasonably foreseeable future developments in the area, would not cause any notable cumulative effects on the quality or quantity of surface or groundwater in the project area. MDT's engineered road design and the application of upland best management practices (BMPs) would avoid or mitigate potential water quality impacts in the general vicinity of this project.

IMPACTS OF THE NO ACTION ALTERNATIVE. The No Build Alternative would not cause any new effects to surface or groundwater in the Dodson-East project area.

Mitigating Measures (Surface and Groundwater Resources)

The following measures will be implemented to minimize water quality impacts in the Dodson-East project area.

- *An Erosion Control Plan employing Best Management Practices for controlling erosion and sediment transport will be implemented in each project area.*
- *Any restrictions on work near streams or in wetlands will be specified as terms of water-related permits obtained from the MDEQ, MDFWP, and the Corps of Engineers.*
- *Development of revegetation plans, erosion control plans, and storm water pollution preventions plans will be coordinated with appropriate permitting and resources agencies.*

4. FLOODPLAIN IMPACTS

Existing Conditions. The FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) completed a flood insurance study for unincorporated areas of Phillips County during 1987. The Town of Dodson was not included in this study. Based on the study, FEMA produced Flood Insurance Rate Map (FIRM) panels that identify 100-year floodplains by approximate methods. FIRM panels 300162 0525 B and 0550 B depict floodplains in the Dodson-East project area. Phillips County regulates activities within delineated floodplains for the FEMA.

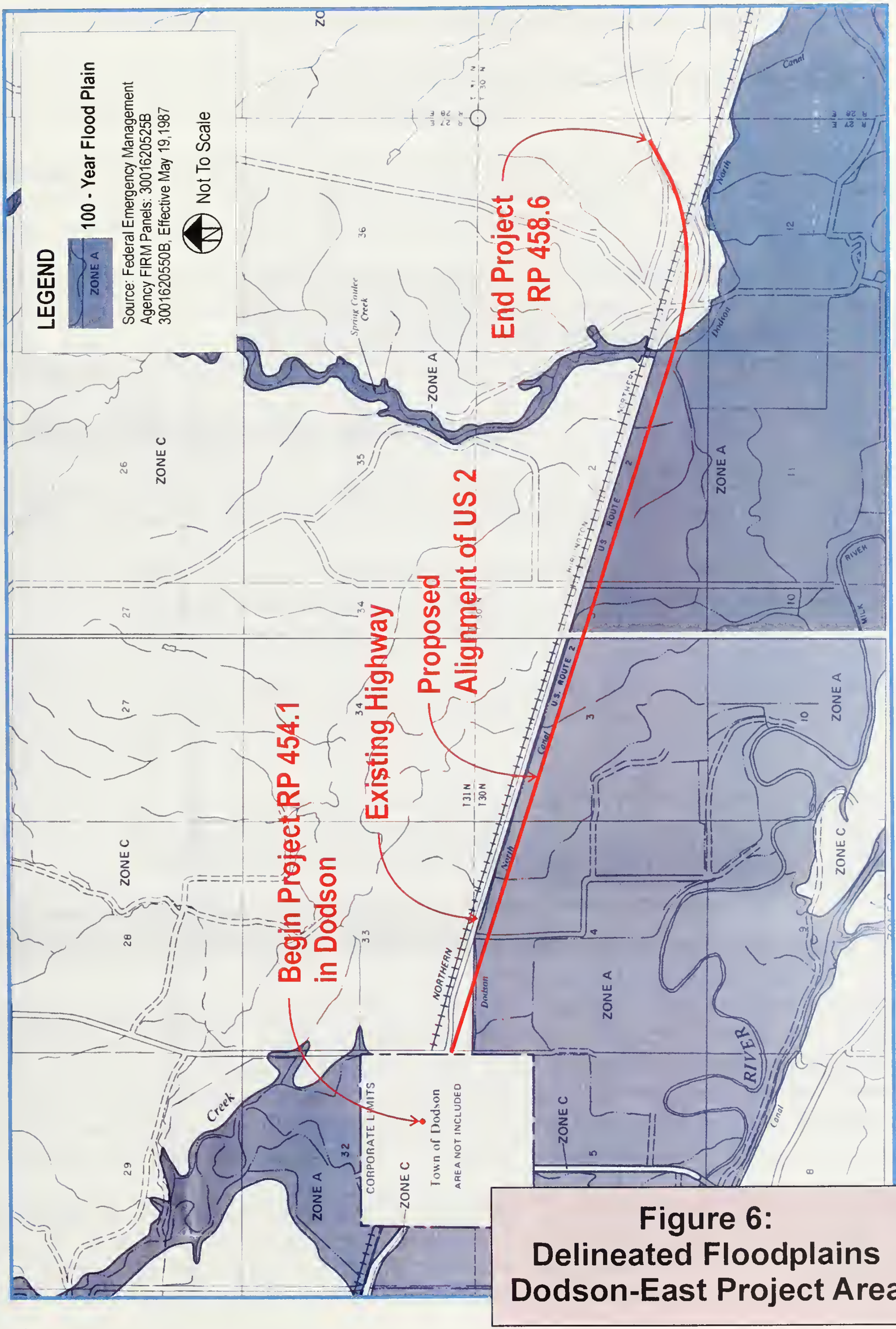
Except in the vicinity of the railroad overpass near the east end of the project, virtually all of the land south of the existing highway lies within a delineated 100-year floodplain (Zone A) of the Milk River. US 2 also crosses 100-year floodplains associated with Dodson Creek and Spring Coulee Creek. **FIGURE 6** shows the location of the delineated floodplains in the project area and MDT's proposed new alignment for US 2.

IMPACTS OF THE PREFERRED ALTERNATIVE. **Executive Order No. 11988** (*Floodplain Management)* and FHWA's floodplain regulations (23 CFR 650, Subpart A) require that the effects of the proposed action be evaluated to determine if any of its alternatives encroach on the "base" floodplain. The base floodplain is the area covered by water from the 100-year flood. The 100-year flood represents a flood event that has a 1% chance of being equaled or exceeded in any given year. **Executive Order No. 11998** requires that federal agencies, in carrying out their proposed projects, provide leadership and take action to reduce the risk of flood loss; minimize the impacts of floods on human safety, health, and welfare; and restore and preserve the natural and beneficial values served by floodplains.

As indicated above and shown in **FIGURE 6**, virtually all of the land south of the existing highway lies within the delineated 100-year floodplain of the Milk River. The proposed alignment of US 2 would require longitudinal encroachments on this broad floodplain area. The proposed project would also require transverse encroachments on the floodplains associated with Dodson Creek and its overflow channels and Spring Coulee.

MDT does not believe that the floodplain impacts associated with the Preferred Alternative would be significant since the new road would be built across the northern fringe of the delineated floodplain and existing surface drainages would be perpetuated. MDT has already modeled various drainage crossings that lie within the floodplain to establish the hydraulic characteristics and conditions that must be maintained. To date, this work has not indicated that the Preferred Alternative has the potential to cause notable adverse floodplain impacts or an increased risk of flooding and property damage.

MDT's standard procedures and specifications would be employed to ensure that the required encroachment meets FHWA guidelines. The new bridges and culverts included with the project would be designed in a manner that would not increase water surface elevations more than 0.15 m (0.5 feet) over existing conditions for the 100-year flood event. Consistent with the requirements of **Executive Order No. 11988,** the proposed project would not be expected to



Source: Federal Emergency Management Agency FIRM Panels: 3001620525B 3001620550B, Effective May 19, 1987

Figure 6:
Delineated Floodplains
Dodson-East Project Area

graph13.cdr

promote or encourage development within the floodplain or increase flood liability hazards.

A floodplain permit from Phillips County would be required prior to construction of the new highway within or across delineated floodplains.

CUMULATIVE IMPACTS. This project, together with others known in the area, would not be expected to cause any cumulative impacts on delineated floodplains because of MDT's hydraulic design considerations for the new road and its associated bridge and culverts.

IMPACTS OF THE NO ACTION ALTERNATIVE. This alternative would have no new effects to floodplains in the project area. There are no risks of new flooding incurred, no impacts on natural and beneficial floodplain values, and no likelihood of incompatible floodplain development.

Mitigation Measures (Floodplain Impacts)

The following measures will be implemented to minimize any floodplain concerns associated with MDT's proposed reconstruction of US 2 in the Dodson-East project area.

- *MDT will obtain a Floodplain Development Permit from the Phillips County Floodplain Administrator for construction activities within the delineated floodplains of the Milk River, Dodson Creek and Spring Coulee Creek.*
- *MDT will coordinate the proposed Dodson-East project with the Town of Dodson to ensure proposed activities are considered in the community's surface drainage plan.*
- *MDT will design the new road and its associated bridges and culverts to ensure that water surface elevations do not substantially increase over existing conditions for the 100-year flood event.*

5. AIR QUALITY IMPACTS

Existing Conditions. Air quality within the project area can be described as good. No past or current violations of state or federal air quality standards are known. Due to the relatively low traffic volumes and rural nature of the project area, extremely low levels of vehicle-generated pollutants would be expected. Localized air quality degradation due may occur for short periods each year due to dust generated by vehicle travel on unpaved roads adjoining US 2, agricultural activities, and from particulates generated by occasional outside burning.

IMPACTS OF THE PREFERRED ALTERNATIVE. The Dodson-East reconstruction project is an action whose individual and cumulative effects would be minor and would not affect regional emissions. These conclusions can be reasonably made on the basis of analyses done for many similar projects across the United States. For these reasons, the Preferred

Alternative would not be expected to result in adverse air quality impacts.

The proposed Dodson-East project is located in an unclassifiable/attainment area of Montana for air quality under 40 CFR 81.327, as amended. As such, the project is not covered under the U.S. ENVIRONMENTAL PROTECTION AGENCY'S (EPA's) Final Rule of November 24, 1993 on Air Quality conformity. Therefore, the proposed project complies with *Section 176(c)* of the *CLEAN AIR ACT* **(42 U.S.C. 7521(a))**, as amended.

Short-term air quality impacts would be anticipated during construction of the proposed project due to the disturbance of relatively large areas and operation of heavy equipment in work zones. These impacts would be minor and limited to the construction period. Dust control may be needed for construction within the Town of Dodson and on any streets used as detours.

CUMULATIVE IMPACTS. No cumulative air quality impacts are anticipated from the proposed Dodson-East improvements and other present and future development activities in the project area. The existing air quality of this region of Montana is high and the proposed US 2 improvements plus other known or anticipated projects in the area would not cause adverse effects to this condition.

IMPACTS OF THE NO ACTION ALTERNATIVE. This alternative would cause no further air quality impacts within the project area.

Mitigation Measures (Air Quality)

The following measure will be implemented to minimize any air quality impacts associated with the construction of MDT's proposed project.

- *If deemed necessary, MDT will incorporate dust control measures into the plans for the proposed project.*

6. IMPACTS TO VEGETATION

Existing Conditions. The majority of the project area is located in the broad floodplain of the Milk River. The extreme western end of the project corridor includes developed lands and vacant lots within the townsite of Dodson. Agricultural development has generally replaced native vegetation and expanses of hay land pasture adjoin the existing highway corridor east of Dodson. Rangeland exists near the east end of the project corridor.

Common grasses observed within the Dodson-East corridor include crested and western wheatgrass, quackgrass, inland saltgrass, smooth brome, and foxtail barley. These are interspersed with sweetclover, prickly lettuce, plains pricklypear, American licorice, milkweed, gumweed, scattered alfalfa, wild sunflower, and other common herbaceous species. Scattered shrubs interspersed with grasslands include black greasewood, silver sagebrush, golden current, snowberry, and woods rose. Plains cottonwood and Russian olive are common trees in the area.

Threatened or Endangered Plants. The U.S. FISH AND WILDLIFE SERVICE (USFWS) lists water howellia and Ute ladies'-tress orchid as threatened plant species in Montana under the *ENDANGERED SPECIES ACT* (**16 U.S.C. 1531-1543**). The USFWS indicated in correspondence in July 1992 that these plant species do not occur in the project area.

Rare or Sensitive Plants. According to the Draft Biological Resource Report prepared by Land & Water Consulting, Inc. in February 2002, no known sensitive plant locations within several kilometers of the project. Of the nine such species identified within Phillips County, only two are known to occur within the latilong (a block of land measuring one degree longitude by one degree latitude) that includes the project area. Long sheath waterweed (*Elodea longivainata*) and dwarf woolly-heads (*Psilocarphus brevissimus*), both associated with wet areas, are known to occur over 16 km (10 miles) northwest of the proposed project. Neither species is a candidate for listing, proposed for listing, or listed as a threatened or endangered species.

Invasive/Noxious Plants. Both the federal and state governments have regulations concerning noxious weeds. **Executive Order No. 13112** (*Invasive Species*) signed in February 1999, requires federal agencies (e.g., FHWA) whose actions may affect the status of invasive species to prevent the introduction of invasive species, detect and control populations of such species, monitor invasive species populations, and restore native species and habitats that have been invaded to the extent practical and permitted by law. At the state level, Montana assigns responsibility for noxious weed control to each county.

According to the Invaders Database System (2001), ten listed or proposed noxious weeds have been identified in Phillips County over the last 20 years. These include: hoary cress, diffuse knapweed, spotted knapweed, Russian knapweed, Canada thistle, field bindweed, houndstounge, leafy spurge, dalmation toadflax, and sulfer cinquefoil. Two of these species, Canada thistle and field bindweed, were observed in the Dodson-East project corridor.

Canada thistle occurs at scattered locations within 100 m (about 300 feet) of the highway for much of the project's length, particularly in seasonally moist areas. Field bindweed commonly occurs in pasture traversed by the existing and proposed highway alignments. Both species are Category 1 noxious weeds as define by the State of Montana. The MONTANA DEPARTMENT OF AGRICULTURE defines Category 1 noxious weeds as "weeds that are currently established and generally widespread in many counties of the state."

IMPACTS OF THE PREFERRED ALTERNATIVE. Temporary disturbances would occur where vegetation is cleared from the right-of-way, at staging areas for construction equipment and at any necessary borrow sites. Virtually all of the proposed construction would occur in areas immediately adjacent to the existing road currently subjected to other sources of human disturbance, including residential and agricultural (farming and grazing) activities. Consequently, the effects of the proposed project on vegetation would be minor. None of the affected vegetation provides high quality habitats for wildlife and waterfowl.

The Dodson-East project would not affect any federally-listed threatened or endangered plant species or any rare and sensitive plant species listed by the MNHP.

Many noxious weeds gain a foothold after ground disturbances. Therefore, the potential for the spread of noxious weeds (like Canadian thistle and field bindweed already in the project area) is a concern due to the disturbance associated with the proposed project. Once noxious weeds become established, they are often extremely difficult and very expensive to eradicate or control. Noxious weed movement from highway corridors onto adjacent land can reduce the value of an area for rangeland, wildlife habitat, or other uses.

Implementation of weed control measures prior to and during construction would reduce the potential severity of this impact. Measures to control weeds include: spraying weeds prior to initial disturbance; use of weed-free soils and other materials, including certified weed-free seed for reclamation; and maintaining weed control along the project for an adequate period of time following construction.

In accordance with **Executive Order No. 13112**, MDT would implement measures to help prevent the introduction of invasive species into the Dodson-East project area. These measures would include coordinating the project with the Phillips County Weed Control District, promptly reseeding disturbed areas with desirable vegetation, and requiring MDT's contractors to follow procedures to prevent the spread of noxious weeds.

CUMULATIVE IMPACTS. Ground disturbing activities from the proposed road reconstruction and other present and future development in the project area could result in the loss of minor amounts of native vegetation and offer the potential for the spread of noxious weeds.

IMPACTS OF THE NO ACTION ALTERNATIVE. This alternative would cause no further impacts on vegetation within the Dodson-East project area

Mitigation Measures (Vegetation Impacts)

The following measures will be implemented to minimize vegetation impacts and reduce the potential for the spread of noxious weeds in the project area.

- *All grubbing and clearing operations will be strictly confined to MDT's defined construction limits.*
- *Disturbed areas will be reseeded as quickly as possible after construction.*
- *A revegetation plan will be developed for this project to be followed by the contractor. The plan will include specifications on seeding methods, seeding dates, types and amounts of mulch and fertilizer, and seed mix components. The plan will also be submitted to the Phillips County Weed Control District for review.*
- *The Contractor must also follow the requirements of the County Noxious Weed Management Act and all county and contract noxious weed control provisions.*

- *Construction equipment must be cleaned prior to entering the project area to avoid the unintentional introduction of noxious weed seed from other sites.*

- *Mulch used for revegetation will be certified as weed-free.*

7. IMPACTS TO WETLANDS

Existing Conditions. Land & Water Consulting, Inc. delineated wetlands in the project area during September 2000 according to criteria and methods outlined in the U.S. ARMY CORPS OF ENGINEERS (COE) *1987 Wetlands Delineation Manual* (Environmental Laboratory, 1987). The manual provides guidance for determining the presence of jurisdictional wetlands based on observations of vegetation, soils, and hydrology. Wetland location maps, found plant species lists, and COE Routine Wetland Determination forms were completed for wetland sites identified within the corridor. Additionally, MDT Field Evaluation forms were completed to assess the many functions and values attributable to wetlands. These materials are included in the Draft Biological Resources Report prepared for MDT in February 2002.

Thirteen primary wetland areas (Sites 1-13) were delineated in and adjacent to the right-of-way corridor of MDT's proposed Dodson-East project. Ten of the thirteen delineated wetland sites would be directly affected by highway reconstruction.

Wetlands along the proposed project generally consist of seasonally-flooded emergent pockets within or adjacent to ephemeral drainages, irrigation canals, and drainage ditches. Emergent species at wetlands in the project area include: quackgrass, inland saltgrass, redtop, foxtail barley, curly dock, cattails, reed canarygrass, meadow foxtail, various sedges, creeping spikerush, alkali cordgrass, and other common wetland species. However, several wetlands sites also support sandbar and yellow willows and more alkali-tolerant species (like saltmarsh bulrush, red saltwort, seaside arrowgrass, kochia, and inland saltgrass).

The principal water sources for most wetland sites are likely a combination of runoff and seepage from the Dodson North Canal and other irrigation conveyances. Direct flooding from these canals, as well as "natural" spring surface flooding from areas such as the Dodson Creek Overflow and Spring Coulee Creek, also appear to supplement wetland hydrology at some sites. Additionally, groundwater may also contribute to wetland hydrology at some sites, including the large marsh that comprises Wetland Site 4 (between RP 455.0 and RP 455.6).

Most sites were considered moderately to highly disturbed due to grazing or proximity to roads and other development. Prominent functions at most sites include sediment/nutrient/toxicant removal and groundwater discharge (seepage from the Dodson North Canal and other canals). Wildlife habitat is a prominent function at several wetlands along the project. The Dodson North Canal (Wetland Site 2) is the only site along the project that provides habitat for fish.

IMPACTS OF THE PREFERRED ALTERNATIVE. Reconstructing US 2 would result in unavoidable encroachments into some wetlands in the project area due to the proposed road realignment and widening and required crossings of area streams and irrigation canals. Wetland vegetation would be removed and hydric soils would be covered with the roadbed and fill slopes in impacted areas. A preliminary design for the proposed highway improvements project has been developed to minimize encroachment into wetlands. However, wetlands are extensive and dispersed throughout the project are making it impossible to construct the new road (or even rebuild the existing facility) on an alignment that totally avoids encroaching on wetlands.

The estimated amount of wetlands that would be impacted by the proposed project is 2.45 hectares (ha) or about 6.05 acres. Of this total, about 2.1 ha (5.21 acres) are considered to be Category III wetlands and 0.35 ha (0.84 acres) are Category IV wetlands according to the 1999 MDT Montana Wetland Assessment Method. Category I is the highest ranking a wetland can be assigned based on MDT's methodology.

The "jurisdictional" status of affected wetlands in the area is an important consideration for this proposed project because of MDT's mitigation requirements. Jurisdictional wetlands are those that fall under the COE jurisdiction with respect to *Section 404* of the *CLEAN WATER ACT*. Generally, the COE maintains jurisdiction over non-isolated wetlands that are hydrologically-charged by irrigation seepage as long as the seepage is considered "normal circumstances" for the wetlands created by the water source. The COE does not generally maintain jurisdiction over wetlands in artificially irrigated areas unless: the wetland has additional hydrological sources; the wetland is of significant regional or local value; or elimination of the irrigation could not be accomplished in the near future.

According to 1995 published guidance, the COE generally did not consider ditches excavated on dry land as jurisdictional "waters of the United States." However, the Omaha District of the COE recently issued guidance to the effect that excavated irrigation and drainage ditches may be considered jurisdictional if they have a downstream surface connection to other waters of the U.S. The Dodson North Canal connects with the Milk River downstream of the project area.

As a result of a January 9, 2001 U.S. Supreme Court decision, many isolated wetlands (those not connected or adjacent to other waters of the U.S.), which previously fell under COE jurisdiction, are now unregulated for *Section 404* purposes.

Based on these considerations, MDT's consulting biologists attempted to assign a "jurisdictional or not classification" to the wetlands affected by the proposed project. Wetland impacts by jurisdictional status, affected wetland types, and MDT wetland category are shown below in **TABLE 4**.

TABLE 4: Impact Summary and Jurisdictional Status of Wetlands in the Dodson-East Project Area

Wetland Type/Category	Likely Jurisdictional Impact Area	Likely Non-Jurisdictional Impact Area	Jurisdiction Unknown Impact Area
Emergent	0.36ha/0.88 acres	0.21ha/0.53 acres	1.66 ha/4.10 acres
Scrub-Shrub	0 ha/0 acres	0 ha/0 acres	0.22 ha/0.54 acres
Forested	0 ha/0 acres	0 ha/0 acres	0 ha/0 acres
Aquatic Bed	0 ha/0 acres	0 ha/0 acres	0 ha/0 acres
TOTALS	**0.36 ha/0.88 acres**	**0.21 ha/0.53 acres**	**1.88 ha/4.64 acres**
MDT Category I	0 ha/0 acres	0 ha/0 acres	0 ha/0 acres
MDT Category II	0 ha/0 acres	0 ha/0 acres	0 ha/0 acres
MDT Category III	0.07 ha/0.17 acres	0.16 ha/0.40 acres	1.88ha/4.64 acres
MDT Category IV	0.29 ha/0.71 acres	0.05 ha/0.13 acres	0 ha/0 acres
TOTALS	**0.36 ha/0.88 acres**	**0.21 ha/0.53 acres**	**1.88 ha/4.64 acres**

CUMULATIVE IMPACTS. No cumulative impacts to wetlands are foreseen as a result of the proposed road reconstruction and bridge replacement project and other present and future development activities in the project area.

IMPACTS OF THE NO ACTION ALTERNATIVE. This alternative would cause no further impacts to wetlands within the project area.

Mitigation Measures (Wetland Impacts)

The *1990 Memorandum of Agreement Between the Environmental Protection Agency and the Department of the Army Concerning the Determination of Mitigation Under the Clean Water Act Section 404(b)(1) Guidelines* requires that wetland mitigation be addressed in the following sequence:

(1) Avoid potential impacts to the maximum extent practicable.
(2) Minimize unavoidable impacts to the extent appropriate and practicable.
(3) Compensate for unavoidable adverse impacts that remain after all appropriate and practicable minimization has been required.

Avoidance and Minimization. Impacts were avoided and minimized to the extent practicable by relocating the highway to the south of the Dodson North Canal, thus avoiding or minimizing impacts to numerous wetlands associated with the canal adjacent to the existing highway. Further, by moving the highway instead of the canal (as was originally proposed), seepage to adjacent wetlands is likely to continue, thus avoiding indirect impacts to the hydrology of nearby wetlands. New bridges are proposed at the Dodson Creek Overflow, Spring Coulee Creek, and two locations on the Dodson North Canal, minimizing impacts to these waterways.

Compensation. Compensatory mitigation for the projected wetland loss is being pursued under the 1996 MDT Interagency Wetland Group operating procedures. Any temporary impacts to wetlands within the right-of-way and construction easement areas would be restored to original contours and revegetated immediately following construction.

- Onsite Possibilities. MDT is exploring the possibility of expanding wetlands north of the existing and proposed highway near Wetland Site 11 (RP 458.0).
- Off-site Possibilities. MDT is presently exploring the possibility of purchasing credits for up to 20 ha (about 50 acres) at a wetland mitigation project near Hinsdale. This Rock Creek Ranch project is sponsored by Ducks Unlimited and the landowner and consists of restoring a wetland oxbow along the Milk River. The wetland project is currently in preliminary stages.

8. IMPACTS TO THREATENED OR ENDANGERED WILDLIFE

Existing Conditions. In accordance with *Section 7(a)* of the *ENDANGERED SPECIES ACT OF 1973*, as amended (**16 U.S.C. 1531 et seq.**), MDT contacted the U.S. FISH AND WILDLIFE SERVICE (USFWS) for a list of endangered, threatened, proposed, and candidate species that could occur in the project area. MDT's consulting biologists then assessed whether or not any of the federally listed threatened or endangered) species or important habitat for the species occur in the project area based on existing habitat and recorded occurrences.

Based on coordination with the USFWS, the following threatened, endangered, proposed, or candidate, species may occur in the Dodson-East project area:

- **Bald eagle** (*Haliaeetus leucocephalus*: threatened, but USFWS has proposed to remove this species from the list of threatened and endangered species);
- **Piping plover** (*Charadrius melodus*: threatened);
- **Mountain plover** (*Charadrius montanus*; proposed threatened); and
- **Black-footed ferret** (*Mustela nigripes*:endangered).

IMPACTS OF THE PREFERRED ALTERNATIVE. The identification of threatened and endangered species and evaluation of potential effects was conducted in accordance with *Section 7* of the *ENDANGERED SPECIES ACT*, (**16 U.S.C. 1531-1543**) as amended.

Impacts to threatened and endangered species can be categorized as direct or indirect effects and such effects may be short-term or long-term. Direct effects are **results** of the proposed action. Direct effects may include loss of habitat and mortality of individuals. Indirect effects are effects caused by the proposed action that are reasonably certain to occur.

The potential impacts on identified threatened and endangered species associated with reconstructing US 2 in the Dodson-East project area are described below.

- **Bald Eagles.** Eagles most likely occur along the Milk River and in the immediate project area as spring and fall migrants. During these periods, eagles may prey on fish and waterfowl along the river, as well as ground squirrels and jackrabbits on farm and rangeland. No bald eagle nest sites are known to occur within several kilometers of the proposed project, and no potential nest habitat would be affected by construction. Consequently, no impacts to nesting eagles are anticipated from the proposed project.

  Construction activities during spring and fall could conceivably temporarily disturb or displace non-breeding eagles where the project is visible from foraging habitat. However, because the areas and duration of disturbances would be relatively confined; no primary habitat along the Milk River would be affected; the Milk River is visually isolated from the project due to the distance; and undisturbed similar habitat for displaced birds is abundant in the surrounding area, these impacts are considered less than substantial.

- **Piping Plover.** The primary habitat for the piping plover includes wetlands and deepwater habitats that contain wide beaches with less sparse vegetation and highly clumped vegetation and/or extensive gravel deposits. In Montana, piping plovers are known to nest on the Medicine Lake and C.M. Russell National Wildlife Refuges (NWR), at Alkali Lake on the Blackfeet Indian Reservation, and along the Missouri River below Fort Peck Dam. Occurrences of the species have also been recorded at Nelson Reservoir and the Bowdoin NWR in Phillips County.

  The project corridor is not generally considered typical piping plover habitat and the species is not known to nest in the immediate project area. For these reasons, no direct or notable indirect impacts to piping plovers are anticipated from the proposed project.

- **Mountain Plover.** Mountain plovers are closely associated with prairie dog towns and landscapes that receive heavy grazing pressure from livestock. The preferred habitat for the species is land vegetated with short grass and shrubs. The largest breeding site occurs within a large black-tailed prairie dog complex in south Blaine and Phillips counties. No mountain plover nesting is known to occur in the project area since only marginal habitat for the species exists in the Dodson-East corridor. For these reasons, no substantial impacts to the mountain plover of their habitat are anticipated to result from the implementation of this project.

  Construction during spring and fall could conceivably disturb transient mountain plovers during stopovers along the work zone for the project. However, similar habitat is abundant in the immediate vicinity and would provide ample habitat for any birds displaced due to construction activities. Therefore, any temporary effects to migrating mountain plovers during construction of the project would be extremely minor.

- **Black-footed Ferret.** Although the Dodson-East project traverses historic habitat for the species, black-footed ferrets are no longer believed to exist in the project area. Additionally, no prairie dog towns, the primary habitat of black-footed ferrets, are known to occur within several kilometers of the project. Consequently, no effects to black-footed ferrets would be expected from this proposed project.

CUMULATIVE EFFECTS. Past land use activities in the Dodson-East project area are not known to have caused harm to any listed threatened, endangered, and candidate species. Because similar activities are likely to continue into the foreseeable future, no adverse cumulative effects to the black-footed ferret, bald eagle, piping plover, and mountain plover would be expected.

DETERMINATION OF EFFECTS. Based on the impact analyses presented above, MDT concluded the proposed reconstruction of US 2 in the Dodson-East project area would have **no effect** on the black-footed ferret and piping plover. The proposed highway project would **not likely jeopardize the continued existence** of the mountain plover, a species proposed for listing as threatened by the USFWS.

The proposed projects could affect bald eagles or their habitat. However, potential effects from the Dodson-East project would be considered discountable, insignificant, or beneficial under the *ENDANGERED SPECIES ACT*. While some effects could occur to the bald eagle, effects are not expected to reach the level where a "take" occurs and habitat would not be significantly modified or degraded. MDT concluded that with the implementation of appropriate conservation measures, the proposed Dodson-East project would have **no effect** on the bald eagle.

IMPACTS OF THE NO ACTION ALTERNATIVE. The No Action Alternative would not result in new impacts to bald eagles, mountain plovers, or black-tailed prairie dogs.

Conservation Measures (Threatened or Endangered Species)

Since little if any potential exists for effects to the black-footed ferret or piping plover as a result of the project, no conservation measure are recommended for these species. The following are recommended conservation measure that would apply to bald eagle and mountain plover.

- *The project manager for the construction of the proposed highway project will contact an MDT biologist to assess the overall status of bald eagles in the project area prior to beginning work. Spatial, and/or time of work restrictions may be necessary if bald eagle nests are established in the project area prior to construction.*
- *Mountain plover nesting status in the project area should be confirmed prior to construction via, at a minimum, coordination with MFWP biologists and a MNHP records check. If any nests are known in the immediate project area, special and temporal construction restrictions may be warranted. Further coordination with the USFWS will be required should new breeding areas be discovered in the project area.*
- *Overhead power lines relocated during construction would be raptor-proofed in accordance with "Suggested Practices for Raptor Protection on Power Lines" (Olendorff et al. 1981).*
- *Disturbed areas would be reseeded as quickly as possible after construction.*
- *Best Management Practices (BMPs) would be followed to minimize the potential for increasing sediment loads in any of the project area waterways.*

9. IMPACTS TO OTHER WILDLIFE AND FISHERIES RESOURCES

Existing Conditions. As indicated previously, the only surface waters in project area include the Dodson Creek Overflow, Dodson North and Dodson Pump Canals, Spring Coulee Creek, and a few minor unnamed drainages. All of these constructed or natural conveyances are intermittent or ephemeral.

With exception of the Dodson North Canal, fish are not known or expected at any drainages or conveyances crossed by US 2. Fish from a reservoir on the Milk River created by the Dodson Dam, located approximately 5 km (3 miles) west of Dodson, are commonly trapped in the Dodson North Canal, which originates at the dam. Such fish, which may include any species present in the nearby reach of the Milk River, are considered lost from area populations since the only opportunity for fish to return to the stream is where the canal rejoins the Milk River some 32 km (20 miles) east of Dodson. Several fish species were recorded in the Dodson North Canal including carp, spottail shiner, yellow perch, black crappie, walleye, fathead minnow, and channel catfish. The Dodson North Canal provides limited habitat for fish and is not managed as a fishery resource by the MONTANA DEPARTMENT OF FISH, WILDLIFE & PARKS (MDFWP).

The wildlife species inhabiting the project area are typical of those occurring in grasslands, cultivated lands, and riparian areas of the northern plains. Fifteen mammalian species are known or suspected to occur in the latilong containing the proposed project. Mule deer, white-tailed deer, pronghorn antelope, porcupine, raccoon, striped skunk, badger, bobcat, coyote, fox, ground squirrels, jackrabbits, and other small mammals occupy habitats in the general area.

Amphibians potentially occurring in the project area include the tiger salamander, Great Plains toad, western chorus frog, and northern leopard frog near wetland and canal habitats. Painted turtle, racers, gopher snake, western rattlesnake, and garter snakes are reptiles that may inhabit the project area.

Birds commonly observed in the project area include western meadowlark, mourning dove, European starling, black-billed magpie, American crow, pheasant, red-winged blackbirds, and killdeer. Nests for rock doves and barn swallows were observed under existing bridges at the Dodson Creek Overflow and Spring Coulee Creek.

Primary habitat and waterfowl use occurs south of the project area along the Milk River. However, the Dodson North Canal and adjacent seepage areas provide only minor habitat for ducks. Although direct evidence of breeding exists for the Canada goose, gadwall, and American wigeon in the general area, the Dodson-East corridor itself is not considered to be an important breeding area for migratory birds.

Common species of raptors likely to occur in the area include bald eagles, golden eagles, Northern harriers, Red-tailed hawk, Swainson's hawk, and the Great Horned owl. No raptor nests were identified within the project corridor.

Rare and Sensitive Wildlife. The MONTANA NATURAL HERITAGE PROGRAM (MNHP) was contacted for information on the occurrence of rare and sensitive wildlife species in the project area. Such species are those listed by the agency as rare, unique to a region of the state, threatened, or endangered throughout their range in Montana, vulnerable to extinction in Montana, or in need of further research. Rare and sensitive species are typically not protected as threatened or endangered under the federal *ENDANGERED SPECIES ACT*.

The swift fox (*Vulpes velox*) may occur east of the Continental Divide in prairies and grasslands. Occurrences of the rare swift fox have been recorded in this portion of north-central Montana but the project area is generally not considered breeding habitat for this species. It is conceivable that this species may periodically occur in the general area, although most observations have been recorded far north of US 2.

Northern leopard frogs (*Rana pipiens*), a MNHP-listed species of concern, have been observed in the Dodson North Canal. Apparently extinct over nearly all of western Montana, this species is still common in the southeastern corner of the state. Its status is uncertain in central and northeastern Montana.

IMPACTS OF THE PREFERRED ALTERNATIVE ON WILDLIFE. In general, the impacts on wildlife associated with the reconstruction of US 2 would include: the temporary loss of and avoidance of habitats adjacent to the construction area; direct mortality from vehicles and construction equipment; and permanent habitat degradation and/or displacement.

Virtually all of the proposed construction would occur in areas that are immediately adjacent to the existing highway and are currently subjected to other sources of human disturbance, including residential and agricultural (farming, grazing) activities. Consequently, habitat to be affected by the project is generally judged to be of moderate to low overall quality for wildlife. Many wildlife species associate at various times of the year with wetland and riparian habitats along the project. The project may result in the loss of as much as 2.45 ha (6.05 acres) of wetlands in the project area.

Construction of the project would result in direct wildlife mortality to those species with limited mobility and/or those that could conceivably be occupying their burrows or nests at the time of construction (e.g., mice, voles, young birds/eggs, frogs, salamanders, snakes, badgers, ground squirrels). More mobile species, such as adult deer, coyotes, and most adult birds, would be able to avoid direct mortality by moving into adjacent habitat.

The Preferred Alternative would result in minor adverse effects to migratory bird species identified in 50 CFR 10.13 and addressed in **Executive Order 13186** (*Responsibilities of Federal Agencies to Protect Migratory Birds*) signed in January 2001. Although not substantial, the project has the potential for direct impacts to nesting waterfowl in the general area and their use of suitable habitat along the Dodson North Canal during the spring. The proposed project would permanently displace some migratory birds from habitat occupied by the new road and would likely cause temporarily displace such species from habitats disturbed by road reconstruction activities. Nests for barn swallows under the existing Spring Coulee bridge would be lost; however, the provision of a replacement structure on the new highway alignment would offer opportunities for swallows to build nests.

Generally, indirect disturbance to wildlife communities in the project area that construction activities would cause is considered minor, as the disturbance would be temporary and alternative habitat similar to that affected by the project is abundant in the general area.

The only rare and sensitive species known to occur in the project area are the swift fox and the leopard frog. Since little, if any, suitable habitat for these species exist along US 2, no effects to these species would be likely to result from the proposed highway project. It is possible that the project could directly impact (e.g., mortality or displacement) the swift fox or leopard frog if they occupy habitat in the project area at the time of construction. Any loss is unlikely to affect the status of either the swift fox or leopard frog.

IMPACTS OF THE PREFERRED ALTERNATIVE ON AQUATIC RESOURCES.
Impacts to fisheries and other aquatic resources as a result of the proposed highway improvements should be minimal since surface waters are intermittent or ephemeral. In general, fish are not known or expected at any drainages or conveyances crossed by US 2 in the Dodson-East corridor. The Dodson North Canal is known to support fish; however, the canal is not managed for its fishery value.

New bridges or adequately sized pipes would be provided at the Dodson Creek Overflow and Spring Coulee Creek. New structures would also be constructed at two new crossings of the Dodson North Canal. These actions are not expected to cause direct harm to any fish or other aquatic life.

Fish passage problems are not expected at ephemeral drainages and conveyances crossed by the project, as fish generally do not occur in these waterways. Fish passage problems are not expected at crossings of the Dodson North Canal as fish entrapped within the canal are already considered lost from the population and have little opportunity for return to the Milk River.

Impacts to the project area drainages would primarily result from direct disturbance associated with bridge construction/removal, culvert replacement, highway fill placement, and pipe inlet/outlet channel realignment and stabilization. Road obliteration and general clearing and grubbing would also occur adjacent to project area drainages and wetlands.

CUMULATIVE IMPACTS. No adverse cumulative effects to wildlife or fisheries are anticipated as a result of the proposed road reconstruction project and other present and future development activities in the project area.

IMPACTS OF THE NO ACTION ALTERNATIVE. This alternative would cause no further impacts to wildlife, fisheries, or aquatic resources in the Dodson-East project area.

Mitigation Measures (Wildlife and Fisheries Impacts)

MDT will implement the following measures to ensure that adverse impacts to wildlife and aquatic species are minimized or avoided.

- *Best Management Practices (BMPs) will be followed to minimize the potential for increasing sediment loads in any of the project area waterways.*
- *Disturbed areas will be reseeded as quickly as possible after construction.*
- *A revegetation plan will be developed for the highway project to be followed by the contractor.*
- *Where replacement of existing barbed wire right-of-way fence is proposed across BLM land, this fencing will be constructed such that pronghorn and mule deer passage is facilitated.*
- *In stream work associated with bridge construction and demolition at the Dodson Creek Overflow will be conducted while the drainage is dry, if possible, to minimize possible downstream sediment-related impacts to the Milk River.*

C. Impacts to the Human and Cultural Environments

1. LAND USE IMPACTS

Land Ownership. The initial 0.6 km (0.4 miles) of the Dodson-East project is located with the incorporated limits of the Town of Dodson. With the exception of one lot owned by the Town of Dodson, lands adjacent to US 2 within the townsite of Dodson are privately owned.

The remainder of the project area is located on privately owned rural lands within Phillips County. However, federal lands managed by the U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT (BLM) are crossed by US 2 in Section 1of Township-30-North; Range-27-East at the east end of the project.

The U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF RECLAMATION and the Burlington Northern Santa Fe Railway also own adjacent and intersecting facilities and/or land (Dodson North Canal and the railroad right-of-way) that would be affected by the proposed project.

Existing Land Uses. The proposed project begins within the platted town site of Dodson and US 2 serves as one of the community's main streets. Lands adjacent to US 2 within Dodson contain scattered commercial and residential development or are vacant. The most notable businesses along US 2 in Dodson are the Equity Cooperative Exchange Elevator, a grocery store, and the Cowboy Bar.

The majority of the Dodson-East corridor passes through rural lands used for agricultural purposes. These lands were typically cleared of rocks and extensively cultivated during the late 1900's and 1910's following the completion of the "Milk River Project" that constructed irrigation facilities through the area. Several larger farm units now occupy project area lands and most land near the highway is used as pasture, hay land, or for raising other irrigated crops. Scattered residences and farms located in the project area are generally accessed from highway approaches on US 2.

Applicable Land Use Plans and Controls. Phillips County has adopted a Comprehensive Master Plan to guide land use and development on all lands in the County. The Master Plan was initially adopted in 1976 and was updated most recently in 1987. The Phillips County Commissioners are responsible for implementing the Master Plan. Phillips County adopted subdivision regulations. County-wide zoning regulations have not been adopted by Phillips County, but zoning exists on lands within the City of Malta.

The BLM manages land uses and activities on the small amount of federally-owned land in the project corridor and the BUREAU OF RECLAMATION has management responsibilities for major irrigation facilities in the Dodson-East project area.

IMPACTS OF THE PREFERRED ALTERNATIVE. The proposed improvement of US 2 would impact lands and existing uses adjacent to the present highway due to a proposed realignment of the roadway. With the exception of developed lands within the Town of Dodson, nearly all of the land affected by the proposed realignment of US 2 is used for grazing livestock, raising forage crops, or for dryland farming.

Impacts to agricultural land uses would include the acquisition of cropland and pasture land for new highway right-of-way and modifications to field access locations. Generally, access to farm fields or pastures from the realigned roadway would be maintained, although the location of access points may be moved to ensure adequate sight distance is provided along the new road. The proposed project would include siphons under the new road at appropriate locations to ensure that use of irrigation water from the Dodson North Canal continues on lands south of the realigned highway.

The proposed project would not adversely affect residential or commercial development along the roadway corridor. This proposed action would not substantially modify or eliminate access to properties adjoining US 2.

The proposed reconstruction of US 2 would not conflict with Phillips County's Comprehensive Plan.

The proposed highway improvements would not be likely to affect the goals or objectives employed by the BLM for managing land uses and activities on federal land in the Dodson-East project area.

CUMULATIVE IMPACTS. The planned highway improvements would not encourage new or undesirable growth and development and would not substantially change property values in the Dodson area.

IMPACTS OF THE NO ACTION ALTERNATIVE. This alternative would cause no changes to existing land uses along US 2 within the Dodson-East project area.

Mitigation Measures (Land Use Impacts)

No mitigating measures are proposed for land use impacts associated with this proposed project. Measures to mitigate the impacts of new right-of-way acquisition are discussed in the following section.

2. RIGHT-OF-WAY AND UTILITY IMPACTS

Existing Conditions. The majority of the existing right-of-way for US 2 in the Dodson-East project area ranges in width from 21.3 m (70 feet) to 30.5 m (100 feet) in width. Easements for the BNSF Railway and the Dodson North Canal parallel the highway right-of-way over most of the project's length. The existing right-of-way increases notably in width in the vicinity of the BNSF overpass at the east end of the proposed project. Preliminary right-of-way plans show the existing easement area to be 85 m (nearly 280 feet) or wider near the railroad overpass. The existing right-of-way for US 2 in the Dodson-East project area totals about 28.5 ha (70.4 acres).

Overhead power lines, underground telephone cables, gas, buried fiber optic and other utility lines exist adjacent to or cross US 2 within the Dodson-East corridor.

IMPACTS OF THE PREFERRED ALTERNATIVE. US 2 would be reconstructed following a new alignment offset from the existing centerline of the highway by more than 60 m (196 feet) through the majority of the Dodson-East project area. Due to this alignment shift, the reconstruction of US 2 would require an estimated 40.4 ha (100.0 acres) of new right-of-way. Please note that this right-of-way total is subject to change since MDT has not yet completed final Right-of-Way plans for the proposed design. During the design process, MDT would identify specific right-of-way needs from lands along the proposed alignment of US 2. Prior to construction MDT would contact each affected landowner regarding the acquisition of new land needed for the highway.

New right-of-way acquisition would result in the loss of minor reductions of agricultural and grazing lands adjacent to the highway corridor. The proposed highway improvements would require the majority of the new right-of-way be acquired from six landowners (Nicholson, Tremblay, Solberg, Blair, Kienenberger, and Christopherson). The new road would also have to cross lands owned by the BNSF Railway.

A new right-of-way easement would also be required across land owned and administered by the BLM in Section 1 of Township-30-North; Range-27-East at the east end of the project. Any existing right-of-way on BLM land no longer needed for the planned highway improvements would revert back to the federal agency.

Coordination must also occur with the BUREAU OF RECLAMATION regarding the construction of new structures across the Dodson North Canal or siphons to transport water beneath the new road. Although land would not be necessary from the Bureau, MDT must reach an agreement with the agency which allows entry onto land controlled by the Bureau and for the subsequent construction of the highway over the their land and facilities. MDT would coordinate the design of the new crossings of the Dodson North Canal with the Bureau.

The proposed Dodson-East project would not require the relocation of any residents or businesses. MDT would acquire all lands needed for right-of-way from private ownerships on this proposed project in accordance with both the *UNIFORM RELOCATION ASSISTANCE AND REAL PROPERTY ACT* of 1970 (**P.L. 91-646**), and the *UNIFORM RELOCATION ACT AMENDMENTS* of 1987 (**P.L. 100-17**). Compensation for right-of-way acquisitions is made at "fair market value" for the "highest and best use" of the land.

Abandoned sections of the old road would be obliterated and reclaimed. Prescriptive, temporary, or permanent easements for existing US 2 right-of-way abandoned as a result of the proposed Dodson-East project would revert to adjoining landowners. Any abandoned rights-of-way held in fee by MDT and that were acquired with federal highway funds, would be offered to a federal agency or typically sold at fair market value.

Overhead power lines, underground telephone cables, buried fiber optic lines, and other utilities cross or exist adjacent to the existing road throughout the Dodson-East project area. Some of these utilities may be in conflict with the proposed highway reconstruction at various locations. Conflicting utilities would be relocated prior to construction. MDT must coordinate the proposed project with the BNSF Railway to secure an easement across railroad property. An agreement must also be reached with BNSF over the design and construction provisions for a new overpass and the removal of the existing structure.

CUMULATIVE IMPACTS. Except for the incremental and minor loss of agricultural land in Phillips County mentioned earlier in this Part, no other cumulative impacts are foreseen from the proposed right-of-way acquisition. The utility relocations required by the proposed highway projects could motivate utility providers to update or make other improvements to their facilities within the corridor.

IMPACTS OF THE NO ACTION ALTERNATIVE. The No Build Alternative would not require any additional right-of-way, affect existing utilities or irrigation facilities, or result in the relocation of residents or businesses in the area.

Mitigation Measures (Right-of-Way Impacts)

The following measures will be implemented to minimize the right-of-way and utilities impacts associated with the proposed highway improvements

- *MDT's Right-of-Way design for each project will attempt to minimize the area required for the new highway and potential effects on adjoining landowners. Temporary construction permits will be used when possible to minimize the need for new right-of-way.*

- *MDT will coordinate with the appropriate utility companies and the Town of Dodson to determine the timing and details of relocating conflicting utilities.*

3. TRANSPORTATION/CIRCULATION IMPACTS

Existing Conditions. As described in detail in Part II, the existing highway has physical deficiencies that contribute to reduced safety and convenience for users of this route. US 2 is a regionally and locally significant transportation route linking Hi-line communities to other major surface transportation routes and providing inter-modal connections to the BNSF Railway.

IMPACTS OF THE PREFERRED ALTERNATIVE. The reconstruction of US 2 would provide traffic safety benefits and a more efficient facility for local residents and other highway users. Road reconstruction would address safety issues by: increasing the width of the roadway; constructing safe roadside slopes; and providing an object-free clear zone adjacent to the road. These measures would reduce the chances for and severity of accidents. The highway would be reconstructed to MDT standards that reflect designs appropriate for both the type and level of traffic using the highway facilities.

No long-term changes to overall travel patterns would be likely due to the reconstruction of the highway and provisions of new bridges. Traffic volumes on the road would not be expected to substantially increase over present conditions.

CUMULATIVE IMPACTS. The proposed highway reconstruction project, together with other known and reasonably foreseeable actions, would not encourage new or undesirable growth in the Dodson area. This conclusion was reached because the action of rebuilding a short segment of the existing highway alone would not cause more people or businesses to move to the area. If growth were to occur in the area, it would be the result of factors other than simply providing a slightly wider road and replacing its associated bridges.

IMPACTS OF THE NO ACTION ALTERNATIVE. The No Action Alternative would not require any additional right-of-way, affect existing utilities, or result in the relocation of residents or businesses in the area.

Mitigation Measures (Transportation/Circulation Impacts)

The following measures will be incorporated into the proposed project to minimize impacts to traffic and circulation:

- *MDT will maintain traffic through the project area during construction by allowing continued use of the existing road and will attempt to minimize delays.*
- *MDT will ensure that access to properties adjacent to the highway is maintained throughout the construction period.*

4. SOCIAL IMPACTS/ENVIRONMENTAL JUSTICE

Existing Conditions. The Dodson-East project area includes the Town of Dodson and rural portions of Phillips County. According to the U.S. BUREAU OF THE CENSUS, the population of the Town of Dodson was estimated to be about 122 and Phillips County's population was estimated to be 4,601 as of March 21, 2001 (http://ceic.commerce.state.mt.us/C2000/PL2000/index.htm). This information suggests that since 1990, the populations of Phillips County and the Town of Dodson have declined by some 11%. Since 1980, the County's population has declined by more than 22% and the population of the Town of Dodson has declined by nearly 14%.

Projections of population obtained from the MONTANA DEPARTMENT OF COMMERCE (MDOC) Census and Economic Information Center suggest the County's total population may remain at about 4,600 residents by the year 2010. (NPA Data Services, Inc., February 2002, MDOC data release, http://ceic.commerce.state.mt.us/Demog/ project/npa99mt.htm).

Population and socio-economic data for residents of Phillips County is periodically collected and distributed by the U.S. BUREAU OF THE CENSUS and the Montana Census and Economic Information Center of the MDOC. Based on the 2000 Census, the following characteristics are evident for county residents:

- Minorities comprised about 11% of the County's population in 2000.
- About 17.6% of the County's residents were over the age of 65 in 2000.
- The 1999 median household income was estimated to be $28,702.
- The per capita income for all County residents was estimated to be $18,035 in 2000.
- An estimated 18.3% of all County residents lived below the poverty line in 1999.
- The average household size was 2.45 persons in 2000.

School age children in the project area attend public school in Dodson. Dodson School is located in the community, serving students from grades K-12. Children residing in rural areas near Dodson are transported via US 2 by bus or private vehicles to attend school.

Postal service is provided to residents of the project area by the Post Office located in Dodson. Emergency police, sheriff, ambulance, and fire services are dispatched from Malta.

IMPACTS OF THE PREFERRED ALTERNATIVE. **Executive Order 12898** (*Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*) has been observed for this proposed project. This project would not have any significant impact on the location, distribution, density or growth rate of the population of Dodson or Phillips County. The proposed project would not adversely affect any social or ethnic groups and it would not isolate or divide existing residential areas. This alternative would not cause disproportionately high adverse human health or environmental effects on minority and low-income populations. The proposed Dodson-East project would also comply with the provisions of *TITLE VI* of the *CIVIL RIGHTS ACT* (**42 U.S.C. 2000d**, as amended) under the FHWA's regulations (23 CFR 200).

CUMULATIVE IMPACTS. The planned highway improvements would not result in any cumulative effects on the overall population of the project area or any particular social or ethnic groups. As indicated previously, Dodson and surrounding areas have not experienced population growth for several decades. Improving highway facilities in this area would not, by itself, cause increases in population or encourage new development. Reconstructing this or other portions of the state highway system in Phillips County and adjoining counties may result in temporary fluctuations in population as workers migrate in and out of the area during the construction period.

It is difficult to accurately predict any impacts upon growth that may be caused a highway improvement project like this one. Given that there has been little development and no population growth in this area for several decades, improving this two-lane road would likely have no measurable impact on population growth or development. This area is far away from larger population and employment centers, such as Great Falls or Billings. Consequently, it is unlikely that the proposed improvements to US 2, even in conjunction with other projects, would induce people to settle in the area.

IMPACTS OF THE NO ACTION ALTERNATIVE. This alternative would not require the acquisition of land and would not displace households, businesses, or other areas used for human activities. Taking no action would not influence population growth or distribution in or near the Dodson-East project area.

Mitigating Measures (Social Impacts/Environmental Justice)

No mitigating measures are required or proposed.

5. ECONOMIC IMPACTS

Existing Conditions. The economy of Phillips County is based on agriculture with cultivation of dryland and irrigated crops, livestock raising, and agricultural support services being the principal agricultural activities in the county. Farms and ranches in the county primarily produce grain (winter wheat, spring wheat, oats and barley), hay/alfalfa, and livestock (cattle, sheep and hogs/pigs). According to the 1997 Census of Agriculture, from 1992 to 1997, the number of farms in Phillips County increased by 2%, the average size of farms decreased by about 2%, and the amount of land in farms increased slightly. Approximately 66% of the total land in the county is in farms.

Although agriculture is a major industry in the County, non-farm industries (services, retail trade, state and local government, etc.) actually comprise the largest industrial sector in the County's economy. Of the estimated 2,767 jobs in the County in 1999, non-farm industries accounted for about 78% of the total employment (Regional Economic Information System (REIS) for Phillips County, U.S. BUREAU OF ECONOMIC ANALYSIS, 2001).

IMPACTS OF THE PREFERRED ALTERNATIVE. The proposed project would improve the quality of travel on an important interstate freight transportation route and travel corridor. Improved safety for all highway users would decrease the potential for serious motor vehicle accidents. The associated economic costs associated with treating victims of fatal and injury accidents would be decreased accordingly.

Temporary jobs would be created during the construction of the Dodson-East project. Also, the demand for local goods and services (food, lodging, recreation, etc.) would be increased in Dodson or Malta due to the presence of workers temporarily living in the area during the construction of the project. These beneficial economic impacts would be sustained over period when the highway construction project is successively implemented. Local spending by workers during road construction activities may cause a slight increase in the local tax revenues. This impact would likely be small and short-term.

The proposed reconstruction of US 2 would require about 40.4 ha (100 acres) of new right-of-way from adjacent landowners. Right-of-way acquisition would permanently remove this amount of property from the tax rolls and taxes paid on the land would be lost to Phillips County. This loss in property tax revenue would have a negligible effect on revenues for the County. Lost tax revenue would likely be offset since abandoned sections of US 2 and any associated prescriptive, temporary, or permanent right-of-way easements would revert to adjacent landowners upon the completion of the proposed project.

The proposed highway project would not adversely affect or cause notable long-term changes to the economy of Phillips County or the Town of Dodson. There would be no commercial relocations or land acquisitions that would affect the viability of agricultural operations or commercial businesses within the corridor.

CUMULATIVE IMPACTS. Minor, but beneficial, economic impacts to Dodson and Phillips County would likely result as the Dodson-East project and others on US 2 are successively implemented over the next decade. The road reconstruction projects in the area described in Section 13 of this Part, may increase the demand for local goods and services (food, lodging, fuel, and recreation) in communities within Phillips County and adjoining counties during the construction period for each highway project.

Because these projects would not adjoin one another and would be implemented in different years, businesses in Hi-line communities would likely be able to meet such demands for goods and services. Therefore, the cumulative economic effects of implementing the Dodson-East project and others known or proposed in the area would be minor.

IMPACTS OF THE NO ACTION ALTERNATIVE. This alternative would not change economic conditions or cause any new economic impacts to residents or businesses in the project area. MDT would still be obligated to budget funds to maintain the existing facility or perform spot improvements on US 2.

Mitigation Measures (Economic Impacts)

The following measures will be implemented to minimize economic impacts of the proposed project:

- *MDT will maintain traffic through the project area during construction.*
- *Access to agricultural lands adjacent to the project and businesses located within Town of Dodson would be perpetuated during the reconstruction of the highway.*

6. NOISE IMPACTS

Ambient Noise Levels. A few residences along US 2 in or immediately adjacent to the Town of Dodson comprise the most noise-sensitive land uses in the project area. Residences are listed under Activity Category B according the Noise Abatement Criteria (NAC) listed in 23 CFR 772. The generally established maximum exterior noise level for such uses is 67 dBA Leq(h). The term dBA Leq(h) refers to equivalent hourly noise level (in decibels on the A-weighted scale).

Other developed lands in Dodson are considered to be Activity Category C and the NAC specifies a maximum noise level for this category of 72 dBA Leq(h). Rural agricultural lands are considered to be in Activity Category D and the NAC does not specify an associated maximum noise level for this category.

Although MDT did not measure existing traffic noise levels, it is reasonable to conclude that existing noise levels are well below the NAC specified maximum noise levels within the project area. This assumption can be made based on the relatively low traffic volumes on US 2 and reduced travel speeds on the highway through Dodson.

IMPACTS OF THE PREFERRED ALTERNATIVE. Detailed noise analyses are required for Type I highway projects according to 23 CFR 772. Type I projects would build a highway on a new location, physically alter the existing roadway to significantly change its horizontal or vertical alignment, or increase the number of through traffic lanes. A significant change in alignment would occur if the horizontal distance between the highway centerline and the noise receiver was halved or if changes in the profile of the road are 6 m (20 feet) or more.

MDT did not perform a detailed noise analysis for the Dodson-East project because the number of through traffic lanes would not be increased; the horizontal distance between the highway centerline and noise receivers would not be halved; and the profile of the road would not be notably changed. Although the proposed shift in the horizontal alignment of US 2 is notable east of Dodson, noise sensitive receivers (rural residences) do not exist near the new road's location. The road's location would not change in or immediately east of Dodson where noise sensitive uses (residences) do exist near the highway.

CUMULATIVE IMPACTS. The proposed road reconstruction project and other reasonably foreseeable actions in the project area would not result in any cumulative noise impacts.

IMPACTS OF THE NO ACTION ALTERNATIVE. This alternative would cause no further traffic noise impacts within the project area. The operation of heavy equipment needed for maintenance of US 2 could generate noise potentially noticeable to highway users or those within close proximity to work zones.

7. HAZARDOUS SUBSTANCES

Existing Conditions. Hazardous materials are products or wastes regulated by the U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) or the MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY (MDEQ). These include substances regulated under the *COMPREHENSIVE EMERGENCY RESPONSE, COMPENSATION, AND LIABILITY ACT* (CERCLA of Superfund), the *RESOURCE CONSERVATION AND RECOVERY ACT* (RCRA), and regulations for solid waste management, above-ground storage tanks (ASTs) and underground storage tanks (USTs).

No National Priority List (NPL) or Superfund sites identified by the EPA are located in or near the Dodson-East project area. The EPA's current list of the RCRA regulated treatment, storage, and disposal facilities and hazardous waste generators was reviewed to determine if any such facilities exist in the project area. There are no EPA-listed handlers of hazardous waste in the Dodson area.

MDT reviewed the project area for potential sources of hazardous waste and examined records of known hazardous waste sites and hazardous waste generators in the Dodson-East corridor. MDEQ's current list of underground storage tank (UST) and leaking underground storage tank (LUST) facilities was reviewed as part of this evaluation. The project area was found to include two sites with confirmed releases since 1995 as shown in **TABLE 5**.

TABLE 5: Leaking Underground Storage Tank (LUST) Sites in the Dodson-East Project Area

MDEQ LUST ID#	Name/Description	Location	Confirmed Release Date	Active Site
3613945*3912	Former Dodson Conoco	SW corner, US 2 & Barrett Ave.	2/17/00	Yes
3611371*2793	K&L Grocery	Hwy. 2 – address unknown	10/24/95	Yes
3606076*727	Ted's Exxon	401 Hwy. 2 E, Box 117	5/7/91	No

MDT completed a preliminary site investigation of the former Dodson Conoco station in July 2000 and found that petroleum hydrocarbon impacted soil exists at shallow depths at the intersection of Barrett Avenue and US 2. None of the other known LUST sites would be within the existing or proposed right-of-way for the Dodson-East project.

IMPACTS OF THE PREFERRED ALTERNATIVE. MDT reviewed the potential sources of hazardous waste and examined records for known hazardous waste sites and hazardous materials concerns. One site, the former Dodson Conoco station, presents a concern for petroleum hydrocarbon contamination at the intersection of Barrett Avenue and US 2. This situation requires that special provisions be included in the contract plans to properly handle or dispose of this contaminated material.

The only other known sources of hazardous wastes for the proposed project associated with the equipment used for construction of the new roadway and its related features. These are the fuels, lubricants, hydraulic fluids, and related items needed for construction vehicles and equipment. A slight risk of the release of these hazardous fluids exists since vehicles and heavy equipment would be operating within the project area throughout the construction period.

Special provisions for salvaging and disposing of any treated timbers from the Dodson Creek Overflow Bridge, Spring Coulee bridge or other structures associated with the roadway would be included in the contract plans for the project. Disposal of non-salvageable and left-over materials would be in accordance with all applicable laws, rules, and regulations, including the *MONTANA SOLID WASTE MANAGEMENT ACT*.

CUMULATIVE IMPACTS. The cumulative impacts of the generation and handling of hazardous materials for the proposed Dodson-East project together with other developments in the project area would be negligible. This conclusion was made due to the undeveloped nature of lands and the general absence of hazardous materials in rural portions of Phillips County and adjoining areas.

IMPACTS OF THE NO ACTION ALTERNATIVE. This alternative would have no impacts on hazardous waste sites, generators, or substances. A low potential for the release of hazardous fluids exists since MDT would operate trucks and other heavy equipment during the performance of required road maintenance activities.

Mitigation Measures (Hazardous Materials/Substances)

The following measures will be implemented to minimize hazardous waste impacts of the proposed project:

- *A special provision will be included in the contract plans requiring the contractor for the project to properly handle and disposed of petroleum hydrocarbon impacted soils.*
- *The contractor for the project will be required to store fuel and other hazardous materials away from surface waters and wetlands to reduce the potential adverse effects of an accidental spill.*
- *The contractor for the project will be required to plan for and implement containment procedures in response to any accidental spills of fuel or other hazardous materials.*

8. IMPACTS TO CULTURAL, ARCHAEOLOGICAL AND HISTORICAL REOURCES

Existing Conditions. Cultural resources are protected by the *NATIONAL HISTORIC PRESERVATION ACT OF 1966*, as amended **(16 U.S.C. 470 et seq.)**. This law and its implementing regulations require the identification and evaluation of significant historical resources that a project may impact. It further requires that resources so identified be avoided, if possible, or when avoidance is not possible, that any adverse effects of the project on the resources be mitigated. Coordination is also required with the MONTANA STATE HISTORIC PRESERVATION OFFICE (SHPO) and the ADVISORY COUNCIL ON HISTORIC PRESERVATION (ACHP).

Renewable Technologies Inc. (RTI) performed a cultural resource survey for the proposed Dodson-East highway improvement project in April 1993, and updated their findings in December 2000. The December 2000 update examined a total of fourteen sites, ten of which had been previously recorded. **TABLE 6** provides a current summary of all cultural sites recorded within the Dodson-East project area, including both their 1993 and current *National Register of Historic Places* (NRHP) eligibility status. New properties addressed in RTI's study included: the Thackeray Repair Shop (24PH3575), the Cowboy Bar (24PH3576), and segments of the Dodson North Canal and Dodson Pump Canal Wasteway (24PH1849).

The cultural resources survey found no evidence of prehistoric archaeological sites or artifacts in the project area. A preliminary records search revealed the existence of five previously recorded prehistoric sites located 1.2 km (0.75 miles) north of US 2. No work associated with the proposed highway construction would occur within the vicinity of these prehistoric sites.

A copy of RTI's December 2000 Cultural Resources Report was provided to the BUREAU OF RECLAMATION in Billings.

SHPO concurred with NRHP eligibility determinations for the Great Northern Railway Main Line, Dodson Mercantile, and Cowboy Bar on June 11, 2001. The Dodson Pump Canal Wasteway was determined eligible for the NRHP through cultural resource evaluation work done previously by the Bureau of Reclamation. A copy of the letter indicating SHPO's concurrence with the findings of MDT's Cultural Resource Report and NRHP eligibility determinations can be found in **APPENDIX B**.

The existing timber bridges over the Dodson Creek Overflow (RP 456.0) and Spring Coulee (RP 457.7) and the BNSF Railway Overpass (RP 458.3) are over 50 years old. As such these structures are covered by MDT's existing historic roads and bridges Programmatic Agreement with the FHWA, the SHPO, and the ADVISORY COUNCIL ON HISTORIC PRESERVATION (ACHP). The Programmatic Agreement was enacted in lieu of regular procedures for compliance with *Section 106* of the *NATIONAL HISTORIC PRESERVATION ACT* **(16 U.S.C. 470f)** as applied only to historic roads and bridges in Montana. *Section 106* has been complied with pursuant to this Programmatic Agreement.

TABLE 6: Archaeological and Historic Sites Dodson-East Project Area

Site Number	Name/Description	NHRP* Status (1993)	NHRP* Status (2002)
24PH3114	Equity Cooperative Exchange Elevator	Ineligible	Ineligible
24PH3115	Dodson Drug Company Building	Ineligible	Ineligible
24PH3116	Conoco Service Station	Ineligible	Ineligible
24PH3117	H. Earl Clack Service Station	Ineligible	Ineligible
24PH3118	Great Northern Railway Main Line	Eligible	Eligible
24PH3119	Great Northern Railway Stock Pens	Ineligible	Ineligible (no longer existing)
24PH3120	Jones Farmstead	Ineligible	Ineligible (outside area)
24PH3121	Dodson Mercantile Company Building	Eligible	Eligible
24PH3122	Mark and Serese Pankratz House	Ineligible	Ineligible
24PH3123	C.E. and Ethel Taylor House	Eligible	Ineligible (relocated and altered)
24PH3575	Thackeray Repair Shop	(not recorded)	Ineligible
24PH3576	Cowboy Bar	(not recorded)	Eligible
24PH1849** (addendum)	Segment of Dodson North Canal	(not recorded)	Non-contributing
24PH1849** (addendum)	Dodson Pump Canal Wasteway	(not recorded)	Contributing
None assigned	Dodson Creek Overflow Timber Bridge	No NRHP-eligibility determination required for structure under existing Programmatic Agreement	
None assigned	Spring Coulee Timber Bridge	No NRHP-eligibility determination required for structure under existing Programmatic Agreement	
None assigned	BNSF Railway Overpass	No NRHP-eligibility determination required for structure under existing Programmatic Agreement	

***NRHP** - National Register of Historic Places
****Site 24PH1849** - Malta Division of the Milk River Irrigation Project

IMPACTS OF THE PREFERRED ALTERNATIVE. Cultural resource surveys performed for the proposed project indicate that four properties eligible for the NRHP exist within the Dodson-East project area. The potential effects to these historic properties from the proposed highway reconstruction are described in the paragraphs that follow.

- **Impacts on the Great Northern Railway Main Line.** 24PH3118 is a 6.9 km (4.3 mile) long segment of the former Great Northern Railway Main Line. It should be noted that the entire Great Northern Railway main line in Montana is generally considered to be NRHP-eligible. Within the project area, the old railroad line parallels US 2 to the south until the end of the project at the railroad overpass where the highway shifts to the north. The proposed project would relocate US 2 further south (away from the old main line) and construct a new railroad overpass northwest of the existing overpass. The proposed project would require a new right-of-way easement from the BNSF Railway (the company that acquired the old railway mainline) for the new overpass and its approaches on US 2.

MDT's proposed project would not remove or relocate any track or facilities and the only encroachment on the existing railroad would be to construct a replacement highway overpass structure. The overall appearance of the cultural landscape and setting of the railroad line through the Dodson area would be unchanged.

The proposed highway reconstruction would have a negligible effect to the Great Northern Historic District, a NRHP-eligible site that encompasses the railroad's entire main line network across Montana.

- **Impacts on the Dodson Mercantile Company Building and Cowboy Bar.** The Dodson Mercantile Company Building and Cowboy Bar are located in the Town of Dodson. The Dodson Mercantile Company Building dates from 1910 and was a long-time landmark near the beginning of the Dodson-East project in the community's commercial district. The site consists of the mercantile building and a small wooden outbuilding. The buildings' historical significance stems from the fact that it represents a good example of early commercial building styles in the area. The Cowboy Bar was built in 1951 and also represents a good example of commercial building styles from its era of construction.

  The proposed highway improvements would be constructed within the existing right-of-way along the north edge of the lots housing 24PH3121 and 24PH3576. The Dodson-East project would provide only a slightly wider roadway than the existing facility and would install curbs and gutters and replace an existing sidewalk in front of the historic properties. The proposed improvements would not affect any features of the buildings that make the structures eligible for the NRHP or change the setting of these properties.

- **Impacts on the Dodson Pump Canal Wasteway.** The Dodson Pump Canal Wasteway is a feature associated with the Malta Division of the Milk River Irrigation Project. Collectively, features and facilities associated with the historic irrigation project have been assigned the site number 24PH1849. The Dodson Pump Canal Wasteway is a previously unexamined canal segment that parallels the south side of US 2 for about 0.8 km (0.5 miles) before joining the Dodson North Canal. All features associated with the Dodson Pump Canal, including the wasteway, were built in 1946. The wasteway is in its original location, has retained much of its as-built appearance, and its associated structures are nearly intact.

  MDT's planned highway project would rebuild US 2 on a new alignment south of the wasteway and would require the construction of a new bridge across the Dodson North Canal near the location of the wasteway outfall. The Preferred Alternative would require the relocation of approximately 350 m (about 1,150 feet) of the Dodson Pump Canal Wasteway. Although the canal would be relocated, its original function would remain intact and it would continue to serve as an overflow channel from the Dodson North

Canal. The relationship of the original canal to the highway would be perpetuated since the relocated canal would also parallel the south side of the new road. Although highway-related construction would result in minor changes to the appearance of lands adjoining the Dodson North Canal and Dodson Pump Canal Wasteway, these changes in "setting" would not be adverse. The canal's association with the Milk River Project and its connection to the Dodson North Canal would be perpetuated.

- **Impacts to Historic Bridges.** Since the Preferred Alternative would reconstruct US 2 on a new alignment south of the existing highway, the Dodson Creek Overflow and Spring Coulee timber bridges would be bypassed and new bridges or pipes would be provided to cross these waterways. If desired by adjoining landowners, MDT would allow the existing timber bridges to remain in place and preserve access to abandoned right-of-way areas between the BNSF Railway and the present highway. The Preferred Alternative would eliminate most vehicle use of the timber bridges and avoid any direct impacts to the historic qualities of the structures.

  The existing BNSF Railway Overpass would be offered for adoption and if no taker can be found, the structure would be demolished and removed after construction of the proposed project. Prior to its demolition, MDT would record the overpass structure to HISTORIC AMERICAN ENGINEERING RECORD (HAER) standards.

Federally funded actions affecting historic sites that are on, or considered as eligible for the NRHP also must comply with *Section 4(f)* of the *U.S. DEPARTMENT OF TRANSPORTATION Act* of 1966, as amended (**49 U.S.C. 303**). This compliance is discussed later in this Part.

DETERMINATIONS OF EFFECT. MDT submitted a Determination of Effect to SHPO on November 13, 2001 indicating the proposed Dodson-East project would have **no effect** to the Great Northern Railway Main Line, Dodson Mercantile Company Building, or the Cowboy Bar. MDT further determined that the proposed project would have **no adverse effect** to the Dodson Pump Canal Wasteway. SHPO concurred with MDT's determinations on November 27, 2001. A copy of the letter transmitting MDT's Determination of Effect and with SHPO's stamp of concurrence and the Determination of Effect can be found in **APPENDIX B**.

In accordance with the existing Programmatic Agreement, there is no need to prepare Determinations of Effect for the two timber bridges and the BNSF Railway Overpass.

CUMULATIVE IMPACTS. The likelihood for encountering cultural materials increases as new lands are disturbed by highway improvement projects and other ongoing and future developments in the area. However, the likelihood of discovering new cultural sites with this project is remote since it primarily follows the existing road alignment without excavating a significant amount of undisturbed land. In the unlikely event new cultural sites were discovered during the course of construction, mitigation measures would be implemented to protect them.

IMPACTS OF THE NO ACTION ALTERNATIVE. The No Action Alternative would not result in any further effects on the cultural resources in the Dodson-East project area.

Mitigation Measures (Cultural Resources)

The following measures will be implemented to minimize potential impacts on cultural resources due to implementation of the proposed project:

- *The proposed project will be coordinated with the Montana SHPO, ACHP (if necessary), and the Bureau of Reclamation to ensure that appropriate protection is afforded to cultural resources in the Dodson-East project area.*
- *The existing BNSF Railway Overpass will be offered for adoption to potential new owners under MDT's Adopt-A-Bridge Program. If an adopting party cannot be found, HAER-level recordation will be conducted for the BNSF Railway Overpass structure prior to its demolition.*
- *The existing timber bridges over the Dodson Creek Overflow and Spring Coulee will be retained in place if acceptable to adjoining landowners.*
- *If unanticipated cultural materials were encountered during construction, MDT will require the contractor(s) to temporarily suspend work in the immediate vicinity of the find until the significance of the cultural materials can be assessed.*

9. *SECTION 4(f)* PROPERTIES

Existing Conditions. *Section 4(f)* of the *U.S. DEPARTMENT OF TRANSPORTATION ACT*, as amended (**49 U.S.C. 303**), applies to Federally-funded transportation actions that affect sites on or eligible for the NRHP, publicly-owned parks, recreation lands, and wildlife and waterfowl refuges.

The proposed reconstruction of US 2 would not affect any wildlife or waterfowl refuges. However, four NRHP-eligible historic properties are located in the general area of the highway project including: the Great Northern Railway Main Line (24PH3118); the Dodson Mercantile Company Building (24PH3121); the Cowboy Bar (24PH3576); and the Dodson Pump Canal Wasteway (24PH1849 - addendum).

Road reconstruction in the Dodson-East corridor would not affect the old Great Northern Railway Mainline (now owned and operated by the BNSF Railway) within Dodson but the proposed alignment would cross over the old railroad mainline near the east end of the project. US 2 would be rebuilt within the existing highway right-of-way near the old Dodson Mercantile Company Building and the Cowboy Bar within the Town of Dodson. However, there would be no direct use or constructive use of land from these *4f* properties. Since the SHPO agreed with the no effect determinations, *Section 4(f)* evaluations are not required for these historic properties.

The new road would also be constructed adjacent to a portion of the Dodson Pump Canal

Wasteway. *Section 4(f)* applies since the proposed project would require the use of land from the NRHP-eligible Wasteway.

According to the FHWA's "*Section 4(f) Policy Paper*", *Section 4(f)* does not apply to the construction of a replacement bridge when a historic bridge is left in place and the proximity impacts of the replacement bridge do not substantially impair the historic integrity of the historic bridge. This would be the case with the Dodson Creek Overflow and Spring Coulee bridges since the new road would be shifted to the south and the timber structures would be allowed to remain in-place.

A new railroad overpass would be built just north of the existing BNSF Railway Overpass. A *Section 4(f)* evaluation is required since the existing bridge is being considered under the present historic roads and bridges Programmatic Agreement and must be demolished.

IMPACTS OF THE PREFERRED ALTERNATIVE. MDT determined the proposed Dodson-East project would have **no adverse effect** to the Dodson Pump Canal Wasteway. As discussed in the previous section, the Preferred Alternative would require the relocation of approximately 350 m (about 1,150 feet) of the Dodson Pump Canal Wasteway.

As described previously, this alternative would adversely impact the existing BNSF Railway Overpass by removing the old bridge after a new overpass is built.

In mid-1983, the FHWA developed a "Nationwide" *Section 4(f)* Evaluation form for projects requiring minor uses of land from NRHP-eligible historic sites. The word minor is narrowly defined as having either a "no effect" or "no adverse effect" (when applying the requirements of *Section 106* of the *National Historic Preservation Act* and 36 CFR Part 800) on the qualities that make the sites eligible for the NRHP. A copy of the FHWA's Programmatic Agreement for minor involvements with historic sites can be found in **APPENDIX C**.

Copies of completed "Nationwide" Programmatic *Section 4(f)* Evaluation forms for the project's potential effects to the Dodson Pump Canal Wasteway and the BNSF Railway Overpass can be found in **APPENDIX C**. The forms programmatically demonstrate compliance with the provisions of *Section 4(f)*.

CUMULATIVE IMPACTS. The potential for encountering *Section 4(f)* properties (principally archaeological or historic sites) increases as highway improvement projects disturb new lands along US 2. *Section 4(f)* requires that planning to identify alternatives that would not require the use of these properties and to minimize harm to the properties should adverse effects be unavoidable. Such planning would occur with the development of new federally funded transportation projects in the area.

IMPACTS OF THE NO ACTION ALTERNATIVE. This alternative would not cause any new effects to sites on or eligible for the NRHP, publicly owned parks, recreation lands, or wildlife and waterfowl refuges.

Mitigation Measures (Section 4(f) Resources)

The Nationwide" Programmatic *Section 4(f)* Evaluation forms for the Dodson Pump Canal Wasteway and the BNSF Railway Overpass found in **APPENDIX C** discuss measures to minimize harm to these properties.

10. *SECTION 6(f)* LANDS

Section 6(f) of the *NATIONAL LAND & WATER CONSERVATION FUND ACT* (**16 U.S.C. 460**) requires that coordination be done to determine if federal funds were used to acquire or improve any lands in the project area for recreation or water conservation purposes. The MDFWP, the agency that administers the Land and Water Conservation Fund (LWCF) in Montana, was contacted about the use of federal monies to acquire or develop recreation facilities in the Dodson-East project area. Due to the lack of publicly-owned recreational lands or facilities adjacent to US 2, there is no likelihood that LWCF funds were used in the Dodson-East project area. Therefore, *Section 6(f)* is not applicable to this proposed project.

11. PEDESTRIAN AND BICYCLIST FACILITIES

Existing Conditions. Although counts are not available to quantify such use, the Dodson-East corridor receives only limited use by pedestrians and bicyclists. Most pedestrian and bicyclist activity would be expected to occur within or near the Town of Dodson. Bicyclists on US 2 must use the road's paved shoulder that ranges from 0.3 m (1 foot) in the rural portions of the project area, to 2.4 m (8 feet) in town. Pedestrians must also use the shoulder or roadside slopes for walking along the highway in rural areas of the roadway corridor.

In Dodson, a sidewalk exists on the south side of US 2 for a portion of the block located between Michigan and Barrett Avenues. This facility is in very poor condition.

IMPACTS OF THE PREFERRED ALTERNATIVE. The Preferred Alternative would provide a wider road shoulders for use by pedestrians and bicyclists and improve safety for these facility users. The proposed road would be constructed to provide 2.8 m (9 feet) wide shoulders to replace the minimal 0.3 m (1 foot) wide shoulders that presently exist along US 2 through most of the project area. The shoulders would incorporate a 0.3 m (1 foot) wide rumble strip reducing the unobstructed shoulder width to 2.5 m (8 feet). The new shoulder would be 2.41 m (7.9 feet) wide in Dodson where curb and gutter would be constructed. The additional shoulder area would increase safety for pedestrians and bicyclists electing to travel through the area on the roadway.

A new sidewalk would be built on the south side of US 2 between Michigan and Barrett Avenues in the Town of Dodson.

Construction would cause only a few inconveniences to bicyclists since traffic would be maintained on the existing roadway. Pedestrian activity at the few residences or businesses located along US 2 could be disrupted for a short period by the construction of curb and gutter and the new sidewalk planned for this project.

CUMULATIVE IMPACTS. Impacts on pedestrian and bicycle use of US 2 and the bridges to be replaced would be positive.

IMPACTS OF THE NO ACTION ALTERNATIVE. There would be no change in the facilities available for bicyclists or pedestrians with the No Action Alternative.

12. IMPACTS TO VISUAL RESOURCES

Existing Conditions. The project area is situated in flat to gently rolling terrain located in the Milk River Valley. Lands adjacent to the highway are covered with common grasses, sagebrush, sweetclover and pricklypear. Riparian areas scattered throughout the project area are notable due to the presence of thick stands of cottonwoods. The dominant man-made features in the project area include: the existing road and its associated features; intersecting roads and streets; fencing; buildings, parking areas, and landscaping within the Dodson area and at other locations along the highway; overhead utilities; and cultivated agricultural land.

The land area seen from the highway corridor is dominated by background landscapes (eroded uplands and isolated ridges and buttes) and foreground landscapes (the rolling hills and agricultural lands adjacent to the road, isolated stream corridors, the Milk River its associated riparian areas, and the developed lands and buildings in the Dodson community). Those who view the existing highway and who would see the reconstructed transportation facilities in the project include permanent residents, seasonal visitors to the area, and commercial freight transporters and other motorists passing through the area on US 2.

IMPACTS OF THE PREFERRED ALTERNATIVE. The Preferred Alternative would not cause change views of the background landscapes. The views of the terrain and other features within the Milk River Valley would remain similar for all highway users.

However, the alignment shift and road widening associated with the proposed improvements would cause minor changes to the foreground landscape of the US 2 within the Dodson-East project area. These changes would be most apparent to highway users. Highway users would notice the increased width of the new roadway and recognize that the right-of-way and clear zone areas would be notably greater than that of the existing facility. Visual changes would be apparent to frequent travelers on this section of US 2 since the relationship of the new road relative to the BNSF Railway and to the Dodson North Canal would be altered. The existing road was constructed between the railroad and the Dodson North Canal over much of the project's length. The proposed realignment would place US 2 south of the existing canal and considerably further from the railroad. The elimination of the reverse curve in the highway just east of Dodson would also be evident to frequent users of the highway.

The proposed realignment would result in minor changes to the view of the road for a few residents of the project area immediately east of Dodson. The road's new location would be slightly closer to one residence on the south side of the highway and slightly further from another home located north of the road.

Permanent visual changes within the project area within the Town of Dodson would include minor intersection and approach improvements and the addition of curb and gutter and sidewalk along the south side of the road in Dodson.

The Preferred Alternative would cause minor, short-term visual impacts during the construction period. Visual changes during construction would include: surface disturbances and clearing until revegetation occurs; temporary sign installations; the storage of excavated material, equipment, and material; and dust and debris from construction activities.

CUMULATIVE IMPACTS. The implementation of this project and other MDT highway projects over the foreseeable future on US 2 would likely change views from the road and of the road for residents and highway users as alignment modifications, road widening, and other improvements to the facility are built. Because other known or reasonably foreseeable projects would not occur in the immediate area, no cumulative effects to the visual resources of the project area are anticipated.

IMPACTS OF THE NO ACTION ALTERNATIVE. There would be no new visual impacts associated with the No Action Alternative.

Mitigation Measures (Visual Impacts)

The following measures will be incorporated with the proposed Dodson-East project to offset potential visual impacts:

- *Disturbed areas will be reseeded as quickly as possible after construction.*
- *Portions of the existing road that cannot be incorporated into the foundation for the new roadway will be obliterated. The ground will be contoured to match the existing terrain in areas where the old road is obliterated.*

13. OTHER SECONDARY AND CUMULATIVE EFFECTS

Secondary (or indirect) effects are those that are caused by an action and are later in time or farther removed in distance but are still reasonably foreseeable. Secondary impacts are generally induced by the initial action and comprise a wide variety of effects such as, changes in land use, water quality, economic conditions, or population density. The secondary impacts of this proposed project are addressed in appropriate sections of this Part.

Cumulative impacts are those effects that result from the incremental consequences of an action when added to other past and reasonably foreseeable future actions regardless of what agency (federal or non-federal) undertakes such actions.

Projects Planned by MDT. Projects under construction or planned by MDT in the vicinity were reviewed to help assess the cumulative impacts of this project. MDT currently has six planned projects on US 2 within 120 km (75 miles) of Dodson, not including the proposed Dodson-East project. These projects are identified and briefly described below:

- **Havre-East; NH 1-6 (24) 384; Control No. 4049** - a planned reconstruction project on 16.41 km (10.2 miles) of US 2 east of Havre. The project begins at RP 383.7 about 113 km (70 miles) west of Dodson. The project would totally reconstruct the highway and replace necessary bridges and drainage structures.

- **Lohman-East & West; NH 1-7(11) 393; Control No. 1314** - a planned reconstruction project on 15.61 km (9.7 miles) of US 2 east and west of Lohman. The project begins at RP 393.4 about 98 km (61 miles) west of Dodson. The project would reconstruct US 2 and provide new structures within the project area.

- **Zurich-Harlem; NH 1-7 (19) 414 F; Control No. 2142** - a planned resurfacing project on 15.93 km (9.9 miles) of US 2 beginning at RP 414.0 and extending easterly. The project begins about 65 km (40 miles) west of Dodson.

- **Fort Belknap-East; NH 1-7 (32) 429; Control No. 3958** - a planned resurfacing project on 27.68 km (17.2 miles) of US 2 beginning at RP 429.0 and extending easterly. The project begins about 40 km (25 miles) west of Dodson. The project is scheduled to occur in Fiscal Year 2002.

- **Phillips Co Line-East; NH 1-8 (24) 446; Control No. 4112** - an planned resurfacing project on 12.55 km (7.8 miles) of US 2 beginning at the Phillips County line and extending eastward. The project begins at RP 446.3 on US 2 and ends at the beginning of the Dodson-East project. The project is scheduled to occur in Fiscal Year 2002.

- **US 2 -Saco; NH 1-8 (25) 499F; Control No. 1515** - a planned reconstruction project on 1.61 km (1 mile) of US 2 near Saco. The project would replace an existing structure and build new approaches. RP 498.84 The project begins about 72 km (45 miles) east of Dodson. The project is scheduled to occur in Fiscal Year 2002.

It should be noted that the availability of funding could affect the timing of implementation for the projects listed above.

During the 2001 Legislature, Senator Kitzenberg of Glasgow, introduced Senate Bill 3 (SB 3) directing MDT to begin planning for the eventual construction of a four-lane highway along the present route of US 2 from the North Dakota border to the Idaho border. SB 3 proposed upgrading US 2 to four-lanes as a means of increasing tourism and stimulating economic development across the Hi-Line of Montana. SB 3 was passed by the Legislature and signed into law (**60-2-133, M.C.A.**) by the Governor in April 2001.

As directed by **60-2-133, M.C.A.**, MDT has started planning for the reconstruction of US 2 from two to four-lanes. MDT recently initiated work on the Havre-Harlem Environmental Impact Statement (EIS) to examine the social, economic, and environmental effects of reconstructing US 2 from a two-lane facility to a four-lane roadway between Havre and Harlem. Harlem is located about 48 km (30 miles) west of the Dodson-East project area. The Havre-Harlem EIS will address three of the projects identified above (Havre-East, Lohman-East & West, and Zurich-Harlem) and has delayed the implementation of these projects until the document is finished. The Havre-Harlem EIS should be completed by mid-2004. The findings of the EIS will be indicative of whether or not expanding US 2 from two-to four-lanes has the potential to increase tourism and encourage additional growth or economic development in this region of Montana.

MDT has elected to advance the Dodson-East project as a two-lane reconstruction project due to the relatively short length of the project and because reconstruction to four-lanes cannot be justified at this time based on traffic capacity or safety needs. Additionally, the Dodson-East project was in MDT's construction program prior to the time that SB 3 was proposed and adopted into law. Implementing this proposed project will not foreclose the opportunity to expand US 2 to a four-lane road in this area at some point in the future.

60-2-133, M.C.A. specifies that MDT may not expend any resources on developing a new four-lane road for US 2 that would jeopardize any future highway projects. The cost of developing a four-lane roadway within the Dodson-East project area would be significantly higher than the proposed two-lane road due to additional right-of-way requirements, the need for substantially wider bridges and railroad overpass, and the increased roadway width. Planning estimates show that the typical costs of expanding the highway to four-lanes may approach $1.96 million/km ($1.21 million/mile) along this portion of US 2. This suggests that the cost of Dodson-East project could be increased by more than $5.4 million if the route were rebuilt to four-lanes instead of the proposed two-lane road. The increased cost of expanding this portion of US 2 to four-lanes would likely delay or jeopardize the implementation of this or other highway projects.

Additionally, **60-2-133, M.C.A.** requires MDT to seek additional federal monies for the four-lane development of US 2 that do not require a state funding match. In the case of the Dodson-East project, there are no other federal funding sources that could be used to pay for expanding the facility to four-lanes.

If US 2 were to become a four-lane road in the future, it would certainly present cumulative impacts to the area when considered together with the Dodson-East and other projects mentioned in this section. However, evaluating the potential impacts of expanding US 2 to four-lanes is beyond the scope of this document and would be a speculative exercise because it is unknown whether or when funding for such an expansion would be available. Moreover, construction of such a four-lane facility would require completion of further environmental analyses pursuant to NEPA and MEPA at the time such expansion was proposed.

A review of these planned highway projects on US 2 in the Dodson area shows that two resurfacing projects (including the adjoining Phillips Co Line-East project) and the US 2-Saco bridge reconstruction project would be would be completed prior to planned implementation date (2004) for the Dodson-East project. The other planned reconstruction projects on US 2 between

Havre and Harlem cannot be implemented until after the Record of Decision on the Havre-Harlem EIS has been approved most likely late in 2004. However, none of these projects would be located closer than about 65 km (40 miles) from the Dodson-East project area.
Because MDT's other active and planned reconstruction projects are not contiguous with the proposed work areas within the Dodson and would not generally occur at the same time, the cumulative environmental impacts of these projects on the proposed Dodson-East project would be minor. Similarly, the proposed improvements within the Dodson area would not be expected to produce any significant cumulative environmental impacts on other proposed projects in MDT's Glendive and Great Falls Districts.

Although these projects occur in the same general area of north-central Montana and would likely be implemented within two or three years of each other, the planning, design, and construction of each project has proceeded independently. Implementing the Dodson-East project would not trigger the need for improvements to other adjoining segments of US 2 in the Dodson area. Likewise, implementation of other road projects within Phillips, Blaine, or Hill Counties would not require that US 2 could not be reconstructed.

MDT would continue to coordinate future projects with the public and other appropriate agencies, complete a review of potential impacts to the environment, and identify requirements for mitigation of any adverse effects as projects are developed and implemented.

Future growth in the Dodson-East project area, Phillips County, or adjoining Counties would likely be driven by factors other than improving this 7.2 km (4.5 mile) long section of US 2. Such factors are primarily related to the national and global economic conditions and the price of energy. For these reasons, it is impossible to predict what types of impacts might occur. It is certain that such development, should it occur, would happen independently of the Dodson-East reconstruction project.

Ongoing and Planned Projects by Others. Known or reasonably foreseeable projects proposed by federal agencies, State of Montana agencies, or others in the general vicinity of the Dodson-East project corridor were reviewed to help assess the potential for cumulative impacts. These projects are identified below.

- **Dodson Wastewater Improvements.** The Town of Dodson has initiated a project to improve the Town's existing wastewater treatment system. Currently, this project is in the preliminary engineering phase and some necessary funding for a planning study has been secured.

- **Milk River Watershed Aerial Study.** The Milk River International Alliance, a local watershed group, is planning to conduct an aerial assessment of the Milk River Valley, from Fresno Reservoir to its confluence with the Missouri River. The aerial photographic assessment is an initial step by the group to identify natural resources problems like erosion and saline seep that may be occurring in the river valley. The project is being undertaken with the support and technical assistance of the NRCS, the Bureau of Reclamation, the DNRC, and various county conservation districts. The Milk River is located about 1 km (0.6 miles) south of the Dodson-East project area.

- **Rocky Boy/North Central Montana Regional Water Supply System.** The MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION (DNRC) and several other groups and agencies are working cooperatively to develop the Rocky Boy/North Central Montana Regional Water Supply System. The system would provide high quality drinking water and water for livestock, to the Rocky Boy's Indian Reservation located southwest of Havre and to communities, rural water districts, and other rural users within portions of Toole, Liberty, Pondera, Hill, Chouteau, and Teton Counties. The system would ultimately serve about 19,000 people. The implementation of the project is currently dependent upon the receipt of Congressional funding.

  The Rocky Boy's Indian Reservation is located about 136 km (85 miles) west of Dodson.

- **Fort Peck Reservation Rural Water System.** This on-going project is intended to bring high quality water from the Missouri River to rural users in Valley, Daniels, Sheridan and Roosevelt counties and within the Fort Peck Indian Reservation. The regional water project is a combined effort of the Dry Prairie Rural Water Authority, a rural water system owned and operated by off-reservation users, and the Assiniboine and Sioux Rural Water System, the water system serving the Fort Peck Indian Reservation. Similar to the proposed Rocky Boy/North Central Montana Regional Water Supply System, the project is being developed in response to the serious water quality problems facing the region.

  At completion, water from the system will be treated to meet all State and Federal drinking standards and will be pumped through some 3,200 miles of pipeline. The system will serve a population of about 31,000 persons over a 7,800 square mile area of northeast Montana. The project is expected to take about 10 years to complete and will provide 1,500 person-years of employment which equates to over $50 million of income over the construction period. The high quality water is expected to enhance the processing abilities of agricultural ventures in the area, including dairies and crop processing plants and is also expected to benefit livestock productivity.

  The Fort Peck Indian Reservation is located about 160 km (100 miles) east of Dodson on US 2.

- **Fort Peck Dam Interpretive Center and Museum.** The COE, USFWS, BLM, and the Fort Peck Interpretive Center, Inc. (a local group) are in the process of constructing a visitor/learning/interpretive center and museum for Fort Peck Lake and Dam. The center will interpret important cultural and natural resources, exhibit works of art and local paleontology resources, and present the history and building of Fort Peck Lake and Dam and settlement of the area. Construction of the facility began in August 2001 and should be completed in 2004. Upon its completion, the interpretive center will be a national attraction.

  The center is located about 177 km (110 miles) east of the Dodson-East project area.

- **Fort Peck Fish Hatchery.** The COE and the MDFWP are undertaking a project to develop a warm-water fish hatchery on the Missouri River just downstream of Fort Peck

Dam. The hatchery project would provide a reliable and cost-effective means for producing a variety of warm water fish including, walleye, sauger, muskie, northern pike, chinook salmon, large mouth and small mouth bass, catfish, and the endangered pallid sturgeon. Construction of the project is expected to begin in 2003 and the new hatchery should be completed by 2005.

The proposed site of the Fort Peck Fish Hatchery is about 177 km (110 miles) east of the Dodson-East project area.

- **Upper Missouri Breaks National Monument Resources Management Plan.** The BLM is in the process of preparing a Resource Management Plan with an associated Environmental Impact Statement (EIS) for the Upper Missouri River Breaks National Monument. This planning activity encompasses approximately 375,000 acres of public land located along the Missouri River including land in Phillips County located about 120 km (75 miles) south of Dodson. The plan will identify the management decisions that are best suited to local, regional, and national needs and concerns. Public scoping activities for the planning effort were concluded in August 2002.

- **Zortman-Landusky Mine Reclamation.** In May 2002, the MDEQ and BLM adopted reclamation plans for two abandoned mines located in the Little Rocky Mountains about 64 km (40 miles) directly south of Dodson in southwestern Phillips County. The reclamation plans were adopted based the findings of the Final Supplemental EIS for reclamation of the Zortman and Landusky mines jointly prepared by the agencies. The Record of Decision on the Final Supplemental EIS clears the way for funding future reclamation activities.

These projects, when considered with the proposed Dodson-East project, would be expected to result in only minor cumulative environmental effects. This conclusion was reached because the projects are not contiguous with the proposed Dodson-East project area on US 2 and would not generally occur at the same time as the proposed highway reconstruction project. The projects at Fort Peck and the Upper Missouri Breaks National Monument are regionally and nationally significant; however, their implementation is unlikely to generate substantial amounts of new travel on US 2 near Dodson or result in new residential or commercial growth in this area.

14. CONSTRUCTION IMPACTS

Road reconstruction activities associated with the Preferred Alternative would cause temporary inconveniences to the traveling public and to local residents. These inconveniences may include slightly longer travel times, minor detours around work zones, and the noise and dust generated by construction equipment. These impacts could be expected to occur at various times throughout two-year-long period required to construct the proposed highway improvements and new structures. Typical impacts associated with the construction are described below:

- **Noise and Vibration.** The operations of heavy machinery like earth moving equipment, paving equipment, power tools, and trucks would create periods of undesirable noise in the project area. Noise due to construction activities would produce short-term impacts for residents and business owners near the highway. Construction-related noise may also temporarily displace some wildlife and bird species from the area or deter such species from using habitats in the vicinity of the roadway.

- **Dust.** The operation of heavy equipment on disturbed areas could produce dust.
- **Water Quality.** Runoff from disturbed surface areas has a minor potential to enter surface waters and adversely affect water quality. Petroleum products and other materials could be spilled during the operation and maintenance of equipment needed to build the new highway facilities.
- **Visual.** Stockpiles of materials and equipment needed for the construction of the new bridge and roadway may cause short-term adverse impacts for local residents and others passing through the project area.
- **Traffic.** Few, if any, disruptions to traffic are anticipated since the existing road would remain in use during the construction period.

At the present time, no borrow source(s) for road fill material needed for construction of the proposed projects has been identified. The contractor(s) selected for the proposed projects must identify and develop any necessary borrow sources and truck the needed material to the work zones. This would cause a minor increase in truck traffic on US 2 and any other roads used for travel to and from the borrow area.

IMPACTS OF THE NO ACTION ALTERNATIVE. The only construction impacts associated with this alternative would be related to the completion of maintenance activities on the existing road and bridges.

Mitigation Measures (Construction Impacts)

Construction impacts will be mitigated through the implementation and enforcement of control measures during construction such as:

- *The contractor will be subject to all state and local laws to minimize construction noise by having mufflers on all equipment.*
- *If dust generated by construction activities becomes a concern, it will be controlled by the required use of either water or another approved dust suppressant.*
- *Erosion control measures will be employed to prevent sediments from reaching the area surface waters or wetlands. Temporary or permanent seeding and mulching will be used to control erosion of disturbed areas.*

- *The contractor will be required to have plan for implementing appropriate measures in the event of an accidental spill.*

All work related to the proposed Dodson-East project would be subject to the provisions included in the current edition of *Standard Specifications for Road and Bridge Construction* as adopted by MDT and the Montana Transportation Commission.

15. PERMITS REQUIRED

The No Action Alternative would not require any permits. However, the Preferred Alternative for the proposed Dodson-East project would require the following permits to be obtained prior to any relevant disturbances:

- ***Section 3(a)* Authorization/*124SPA.*** The proposed projects would be in compliance with the provisions of both Water Quality for *Section 3(a)* authorizations under **75-5-401 (2) M.C.A.** and Stream Protection under (**87-5-501** through **509 M.C.A.**, inclusive).

  A *124SPA* Stream Protection Permit is required by the MDFWP.
  All work would also be in accordance with the *WATER QUALITY ACT OF 1987* (**P.L. 100-4**), as amended.

- ***Section 402* Permit.** The Dodson-East project would be in compliance with the *CLEAN WATER ACT* (**33 U.S.C. 1251 - 1376**) - *Section 402/*Montana Pollutant Discharge Elimination System. Accordingly, MDT would notify the MDEQ of the intent for the proposed project to be covered under the General Permit for storm water discharges associated with construction activity.

- ***Section 404* Permit.** A *CLEAN WATER ACT* (**33 U.S.C. 1251 - 1376**) - *Section 404* permit from the COE would be required for placing fill in wetlands or for the discharge of dredged or fill material associated with culvert replacements. The COE would determine if the proposed project qualifies for "Nationwide" permits under the provisions of 33 CFR 330.

- **Floodplain Development Permit.** A Floodplain Development Permit would be required from Phillips County for the proposed work in the delineated floodplain of the Milk River, Dodson Creek, and Spring Coulee Creek within the Dodson-East project area.

Although no permit is required, MDT must reach an agreement with the BUREAU OF RECLAMATION that allows entry onto land controlled by the Bureau and for the construction of the highway over the agency's land and facilities. MDT must also coordinate the design of the new structures across the Dodson North Canal.

V. Coordination with Others

V. Coordination with Others

This Part summarizes efforts undertaken by MDT to communicate with interested agencies and the public about the proposed highway improvements within the Dodson-East project area. The specific objectives of the activities performed to coordinate this project are to:

- identify and include people, groups, and agencies that may be affected;
- provide opportunities for interested parties to express their views, ideas, and concerns about the project;
- ensure that interested parties receive understandable project; and
- make it apparent to interested parties that their opinions and ideas have been considered during the development of the project.

A. Agency Coordination

1. COOPERATING AGENCIES

Requests to be Cooperating Agencies are typically issued to agencies with jurisdiction or special expertise early in the project under the provisions of 23 CFR 771.111(d). The U.S. DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT (BLM) and BUREAU OF RECLAMATION have jurisdiction over and manage land uses and activities on federal lands and facilities in the Dodson-East project area. MDT requested these agencies to be Cooperating Agencies for this project in January 2000.

MDT will extend invitations to representatives of these Cooperating Agencies to attend field reviews, public meetings, and other important project meetings. The agencies will also be afforded opportunities to review and comment on preliminary design plans for the proposed project. The BLM and BUREAU OF RECLAMATION were also provided with "rough draft" versions of this Environmental Assessment for review and comment. Relevant comments and necessary changes submitted by these agencies have been incorporated into the text of this document.

2. AGENCIES CONSULTED

The following agencies and parties were consulted during the development of this Environmental Assessment:

- U.S. Department of Agriculture, Natural Resources Conservation Service
- U.S. Fish and Wildlife Service
- Federal Highway Administration (Montana Division Office)
- U.S. Department of the Army, Corps of Engineers
- Montana Department of Fish, Wildlife & Parks
- Montana State Historic Preservation Office
- Montana Department of Environmental Quality (Permitting and Compliance Division)

- Natural Heritage Program, Montana State Library
- Phillips County
- Town of Dodson

3. FHWA AUTHORIZATION FOR PROJECT

MDT received authorization from the FHWA to begin preliminary engineering work on the Dodson-East project in March 1991.

B. Public Involvement

1. PROJECT NEWS RELEASE

MDT prepared and distributed a news release announcing its intentions to improve US 2 east of Dodson on January 6, 1992. The news release indicated MDT's planned improvements to this section of highway and requested comments from the public. The news release was made available to area newspapers and radio and television stations.

2. EARLY PROJECT MEETING WITH DODSON TOWN COUNCIL

An informal meeting was held between the Dodson Town Council and staff from MDT's Glendive District occurred in Dodson on December 3, 1990. The meeting was used to explain work proposed for US 2 in Dodson and east of the community and solicit input on the project. Comments were also received from the Town Council on Broadus on January 26, 1993. The meeting was used to solicit comments on the highway improvements. Comments heard at the meeting focused on the following topics:

- More effective measures to slow traffic to the posted speed in town.
- Adding a cross walk on US 2 near Barret Avenue.
- Storm drainage issues and potential conflicts with utilities.
- Adding a sidewalk on the south side of US 2 between Michigan and Barret Avenues.

3. NOVEMBER 18, 1998 PUBLIC MEETING

A Public Information Meeting was held for this project on November 18, 1998 in Dodson. The primary purpose of this meeting was to advise the public of the proposed scope of work for the project and to seek input on alignment options being considered by MDT at the time. The alignment options identified and discussed at the meeting included:

1) shifting US 2 slightly south and relocating a section of the Dodson North Canal;
2) shifting US 2 south of the Dodson North Canal (MDT's current Preferred Alternative);
3) shifting US 2 slightly north of the BNSF Railway; and
4) shifting US 2 north of the BNSF Railway and bypassing Dodson.

Those present at the meeting generally preferred either shifting US 2 slightly south (Option 1 above) or shifting US 2 slightly north of the BNSF (Option 3 above). The public was adamantly opposed to the alignment option (Option 4 above) that would bypass the community due to the potential economic effects on the town, changes in access, and impacts to landowners west of Dodson.

The placement of curb and gutter in town was also discussed at the meeting. Those attending favored placement of curb and gutter on the south side of US 2 in Dodson but saw little merit to including curb and gutter along the north side of the roadway.

4. PLANNED PUBLIC INVOLVEMENT ACTIVITIES

A Notice of Availability for the Environmental Assessment and an Opportunity for a Public Hearing on the Dodson-East project will be mailed to all parties on the mailing list and advertised in local newspapers following FHWA's approval of this document.

Written comments on the Environmental Assessment will be received for at least thirty (30) days following its distribution. Public and agency comments on this document will be evaluated to determine: 1) whether significant impacts will occur from the implementation of the Preferred Alternative; 2) if further consideration of the impacts discussed in the document is needed; and 3) if new issues have arisen that must be addressed in the Environmental Assessment. After the close of the official comment period, revisions will be made to the text of the Environmental Assessment where warranted by the comments received. Unless comments received on the document warrant further investigation, no additional public involvement is planned.

If no significant impacts are identified, MDT will submit a summary of comments received (if any) or a revised Environmental Assessment (if needed) to the FHWA and will request the agency to make a Finding of No Significant Impact (FONSI). The signed FONSI will then be attached to this document or to the revised Environmental Assessment. Federal, State, and local government agencies with interests in the projects and others on the mailing list will be notified of the availability of the FONSI and revised Environmental Assessment.

If significant impacts are found, then MDT and FHWA must determine if an Environmental Impact Statement (EIS) must be prepared to advance the proposed actions.

C. Distribution List for Document

The following agencies, groups, and individuals are being sent a copy of this Environmental Assessment:

FEDERAL, STATE, AND LOCAL AGENCIES WITH INTERESTS IN PROJECT

U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Malta Field Office
HC 65 Box 5000
Malta, MT 59538-0047
Attn: Rick M. Hotaling, Field Manager

U.S. DEPARTMENT OF THE INTERIOR
Bureau of Reclamation
Montana Area Office
P.O. Box 30137
Billings, MT 59107-0137
Attn: Susan Kelly, Area Office Manager

U.S. DEPARTMENT OF THE INTERIOR
Bureau of Reclamation
Montana Area Office
P.O. Box 30137
Billings, MT 59107-0137
Attn: Thomas Sawatzke/Rick Blaskovich

U.S. DEPARTMENT OF THE INTERIOR
U.S. Fish & Wildlife Service
301 South Park, Box 10023
Helena, MT 59626
Attn: Scott Jackson

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service
Malta Service Center
HC 72, Box 7615
Malta, MT 59538-9407

U.S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration
Montana Division Office
2880 Skyway Drive
Helena, MT 59602

U.S. ARMY CORPS OF ENGINEERS
Helena Regulatory Office
10 West 15th Street, Suite 2200
Helena, MT 59626
Attn: Todd Tillinger

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY
P.O. Box 200901
Helena, Montana 59620-0901
Attn: Permitting and Compliance Division

MONTANA DEPARTMENT OF FISH, WILDLIFE & PARKS
1420 East Sixth Avenue
P.O. Box 200701
Helena, MT 59620-0701
Attn: Glenn Phillips, Fisheries Division

MONTANA DEPARTMENT OF FISH, WILDLIFE & PARKS
Headquarters Region 6
Route 1-4210
Glasgow, MT 59230
Attn: Jim Satterfield, Regional Supervisor

STATE LIBRARY
Collection Management Librarian
1515 East Sixth Avenue
Helena, MT 59620-1800

ENVIRONMENTAL QUALITY COUNCIL
Office of the Director
Capitol Post Office Box 215
Helena, MT 59620

PHILLIPS COUNTY COMMISSIONERS
P.O. Box 360
Malta, MT 59538-0360

PHILLIPS COUNTY PLANNER AND SANITARIAN
P.O. Box 328
Malta, MT 59538
Attn: Molly Carson

TOWN OF DODSON
P.O. Box 98
Dodson, MT 59524
Attn: Eldora Henry, Mayor

PHILLCO ECONOMIC GROWTH COUNCIL, INC.
P.O. Box 1637
Malta, MT 59538
Anne M. Boothe, Executive Director

PROJECT AREA LANDOWNERS

Burlington Northern Santa Fe Railway

Donald and Connie Wilkes
P.O. Box 295
Dodson, MT 59524-0295

Al Minugh
P.O. Box 248
Dodson, MT 59524-0248

DVORSHAKS
% Frank E. Cole
P.O. Box 297
Dodson, MT 59524-0297

Sylvia E. Wilke
P.O. Box 223
Dodson, MT 59524-0223

Bud Phillips
P.O. Box 95
Dodson, MT 59524-0095

Robert A. Voise
P.O. Box 14
Dodson, MT 59524-0014

Dixie Ann Moore
P.O. Box 891
Malta, MT 59538-0891

Chad and Michelle Nicholson
P.O. Box 243
Dodson, MT 59524-0243

Floyd R. and Arline Blair
General Delivery
Dodson, MT 59524-9999

Norman and Alice Solberg
P.O. Box 141
Dodson, MT 59524-0141

Steven B. and Barbara A. Tremblay
P.O. Box 237
Dodson, MT 59524-0237

Casey L. and Anne Kienenberger
P.O. Box 157
Dodson, MT 59524-0157

Storme C. Christopherson
P.O. Box 417
Columbia Falls, MT 59912-0417

Malta Irrigation District
509 South 3rd Ave. East
Malta, MT 59538

D. List of Agencies With Jurisdiction and/or Permits Required

The following agencies have permit requirements applicable to the proposed Dodson-East highway improvement project:

U.S. Department of Interior, Bureau of Land Management - Easement for new highway construction across federal land at the east end of project.

U.S. Department of Interior, Bureau of Reclamation - Agreement to enter on and build new highway structures across a section of the Dodson North Canal.

U.S. Department of the Army, Corps of Engineers (Regulatory Office) -- *Section 404* Permit for placing fill material associated with road construction in wetlands or other "Waters of the U.S."

Montana Department of Fish, Wildlife & Parks - *124SPA* Permit as required under the *MONTANA STREAM PROTECTION ACT.*

Montana Department of Environmental Quality, Permitting and Compliance Division - Notice of intent to be covered by General Permit for storm water and pollution prevention plan in accordance with *Section 402*/Montana Pollutant Discharge Elimination System.

Phillips County - Floodplain Development Permit for the proposed work in the delineated floodplain of the Milk River, Dodson Creek (and its overflow channels), and Spring Coulee Creek.

E. List of Other Agencies, Persons, or Groups Contacted or that have Contributed Information

The agencies and individuals below were contacted for information useful to the preparation of this Environmental Assessment.

- Thomas Sawatzke, Supervisory Resource Manager, U.S. Department of the Interior Bureau of Reclamation (Billings)
- Rick Blaskovich, Senior NEPA Specialist, U.S. Department of the Interior, Bureau of Reclamation (Billings)
- Lorna Philp, District Conservationist, Natural Resources and Conservation Service (Malta)

APPENDICES

Appendix A: List of Preparers

The following parties are responsible for the preparation and content of this document:

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Montana Department of Transportation
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Helena, MT 59620-1001

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Helena, MT 59602

The following consultants assisted the Montana Department of Transportation coordinate, develop supporting information, and write this document:

Robert Peccia & Associates, Inc.
Consulting Civil Engineers, Planners and Designers
825 Custer Avenue
P.O. Box 5653
Helena, Montana 59604

Land & Water Consulting, Inc.
Biological Resource Consultants
801 North Last Chance Gulch
P.O. Box 239
Helena, MT 59624

Renewable Technologies, Inc.
Cultural Resource Consultants
511 Metals Bank Building
Butte, MT 59701

Appendix B: Correspondence Pertinent to this Project

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date of Land Evaluation Request **October 30, 2002**
Name of Project **DODSON-EAST** **Project F 1-8 (15) 454; Control No. 1516**	Federal Agency Involved **U.S. DOT Federal Highway Administration/** **Montana Department of Transportation**
Proposed Land Use **Highway Reconstruction and New R/W Acquisition**	County and State **Phillips County, Montana**
PART II *(To be completed by SCS)*	Date Request Received by SCS

Does the site contain prime, unique, statewide or local important farmland? *(If no, the FPPA does not apply - do not complete additional parts of this form).*	Yes ☒ No ☐	Acres Irrigated	Average Farm Size
Major Crop*(s)*	Farmable Land in Govt. Jurisdiction Acres: %	Amount of Farmland As Defined in FPPA Acres: %	
Name of Land Evaluation System Used	Name of Local Site Assessment System	Date Land Evaluation Returned by SCS	

		Alternative Site Rating			
PART III *(To be completed by Federal Agency)* Land Evaluation Information		Proposed Action	Site B	Site C	No-Action
A. Total Acres To Be Converted Directly (New Right-of-Way thru Farmland)		75.5	N/A	N/A	0.0
B. Total Acres To Be Converted Indirectly		0.0	N/A	N/A	0.0
C. Total Acres in Site (Estimated Total Right-of-Way Area)		99.9	N/A	N/A	70.4
PART IV *(To be completed by SCS)* Land Evaluation Information					
A. Total Acres Of Prime And Unique Farmland					
B. Total Acres Of Statewide or Local Important Farmland					
C. Percentage Of Farmland in County or Local Govt. Unit To Be Converted					
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value					
PART V *(To be completed by SCS)* Land Evaluation Criterion Relative Value Of Farmland To Be Converted *(Scale of 0 to 100 Points)*		100			
PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(These criteria are explained in 7 CFR 658.5(b)*	Maximum Points				
1. Area in Nonurban Use	15				
2. Perimeter in Nonurban Use	10				
3. Percent of Site Being Farmed	20				
4. Protection Provided by State and Local Government	20				
5. Distance From Urban Builtup Area	N/A				
6. Distance to Urban Support Services	N/A				
7. Size of Present Farm Unit Compared to Average	10				
8. Creation of Nonfarmable Farmland	25				
9. Availability of Farm Support Services	5				
10. On-Farm Investments	20				
11. Effects of Conversion on Farm Support Services	25				
12. Compatibility With Existing Agricultural Use	10				
TOTAL SITE ASSESSMENT POINTS	160				
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland *(From Part V)*	100				
Total Site Assessment *(From Part VI above or a local Site assessment)*	160				
TOTAL POINTS *(Total of above 2 lines)*	260				

Site Selected:	Date of Selection	Was a Local Site Assessment Used? Yes ☐ No ☐

Reason For

(See Instructions on reverse side)

Form AD-1006 (10-83)

STEPS IN PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

Step 1 - Federal agencies involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (**FPPA**) to nonagricultural uses, will initially complete Parts I and III of form.

Step 2 - Originator will send copies A, B, and C together with maps indicating locations of site(s), to the Soil Conservation Service (SCS) local field office and retain copy D for their files. (Note: SCS has a field office in most counties in the U.S. The field office is usually located in the county seat. A list of field office locations are available from the SCS State Conservationist in each state).

Step 3 - SCS will, within 45 calendar days after receipt of form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland.

Step 4 - In cases where farmland covered by the **FPPA** will be converted by the proposed project, SCS field offices will complete Parts II, IV, and V of the form.

Step 5 - SCS will return copy A and B of the form to the Federal agency involved in the project. Copy C will be retained for SCS records.

Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form.

Step 7 - The Federal agency involved in the proposed project will make a determination as to whether the proposed conversion is consistent with the **FPPA** and the agency's internal policies.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

Part I : In completing the "County and State" questions list all the local governments that are responsible for local land controls where site(s) are to be evaluated.

Part III: In completing item B (Total Acres to Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them.

2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities) that will cause a direct conversion.

Part VI: Do not complete Part VI if a local site assessment is used.

Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type projects such as transportation, powerline and flood control, criteria #5 and #6 will not apply and will be weighted zero, however, criterion # 8 will be weighted a maximum of 25 points, and criterion #11 a maximum of 25 points.

Individual Federal agencies at the national level, may assign relative weights among the 12 site assessment criteria other than those shown in the **FPPA** rule. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total weight points at 160.

In rating alternative sites, Federal agencies shall consider each of the criteria and assign points within the limits established in the **FPPA** rule. Sites most suitable for protection under these criteria will receive the highest total scores, and sites least suitable, the lowest scores.

Part VII: In computing the "Total Site Assessment Points", where a State or local site assessment is used and the total maximum number of points is other than 160, adjust the site assessment points to a base of 160. Example: if the Site Assessment maximum is 200 points; and alternative Site "A" is rated 180 points:

$$\frac{\text{Total Points assigned to Site A}}{\text{Maximum points possible}} = \frac{180}{200} \times 160 = 144 \text{ points for Site "A"}$$

USDA United States
Department of
Agriculture

Natural
Resources
Conservation
Service

Soils Report

Farmland Classification

Soil Survey: Phillips County Area, Montana
Survey Status: Initial
Correlation Date: 06/01/1994
Distribution Date: 01/22/2002

	Map Symbol	Soil Name	Rating
x	60A	HAVRE LOAM, 0 TO 2 PERCENT SLOPES	Farmland of statewide importance
x	90A	HARLAKE CLAY, 0 TO 2 PERCENT SLOPES	Farmland of statewide importance
	93A	BOWDOIN CLAY, 0 TO 2 PERCENT SLOPES	Not prime farmland
	481A	BIGSAG CLAY, 0 TO 2 PERCENT SLOPES	Not prime farmland
x	563C	SCOBEY-KEVIN CLAY LOAMS, 2 TO 8 PERCENT SLOPES	Farmland of statewide importance
x	603A	HAVRE CLAY, 0 TO 2 PERCENT SLOPES	Farmland of statewide importance
	902A	LOSTRIVER-BULLHOOK COMPLEX, 0 TO 2 PERCENT SLOPES	Not prime farmland

USDA

United States
Department of
Agriculture

Natural Resources
Conservation
Service

Malta Field Office
HC72 Box 7615
Malta, Montana 59538-9407

March 27, 2000

Robert Peccia & Associates, Inc.
Daniel M. Norderud, AICP
PO Box 5653
Helena, MT 59604

Subject: Prime Farmland Dodson - East
F 1-8 (15) 454
Control No. 1516

In reference to your letter concerning Prime Farmland within the Dodson - East project area, no Prime Farmland is found based on our soil survey.

Enclosed is a copy of the soil survey map of the project site, and a list of our Prime Farmland soil units.

Please contact me if you need any further assistance.

Sincerely,

Lorna Philp

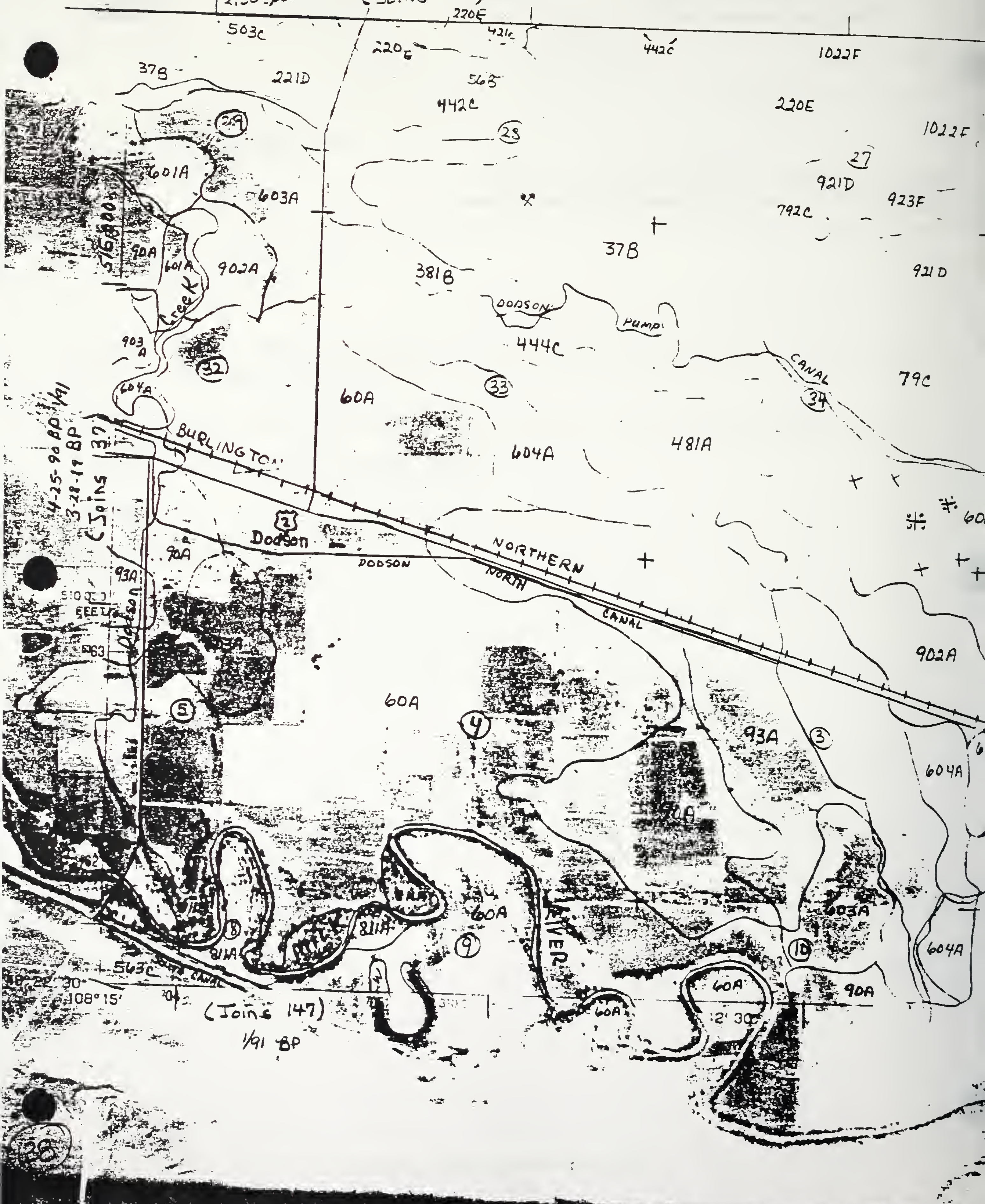
Lorna Philp
District Conservationist

S. DEPARTMENT OF AGRICULTURE
TURAL RESOURCES CONSERVATION SERVICE

PRIME FARMLAND
Phillips County

lap ymbol	Soil name
B	SAVAGE SILTY CLAY LOAM, 0 TO 4 PERCENT SLOPES (where irrigated)
11B	MARTINSDALE-JUDITH LOAMS, 0 TO 4 PERCENT SLOPES (where irrigated)
71B	TAMANEEN-DANVERS CLAY LOAMS, 0 TO 4 PERCENT SLOPES (where irrigated)

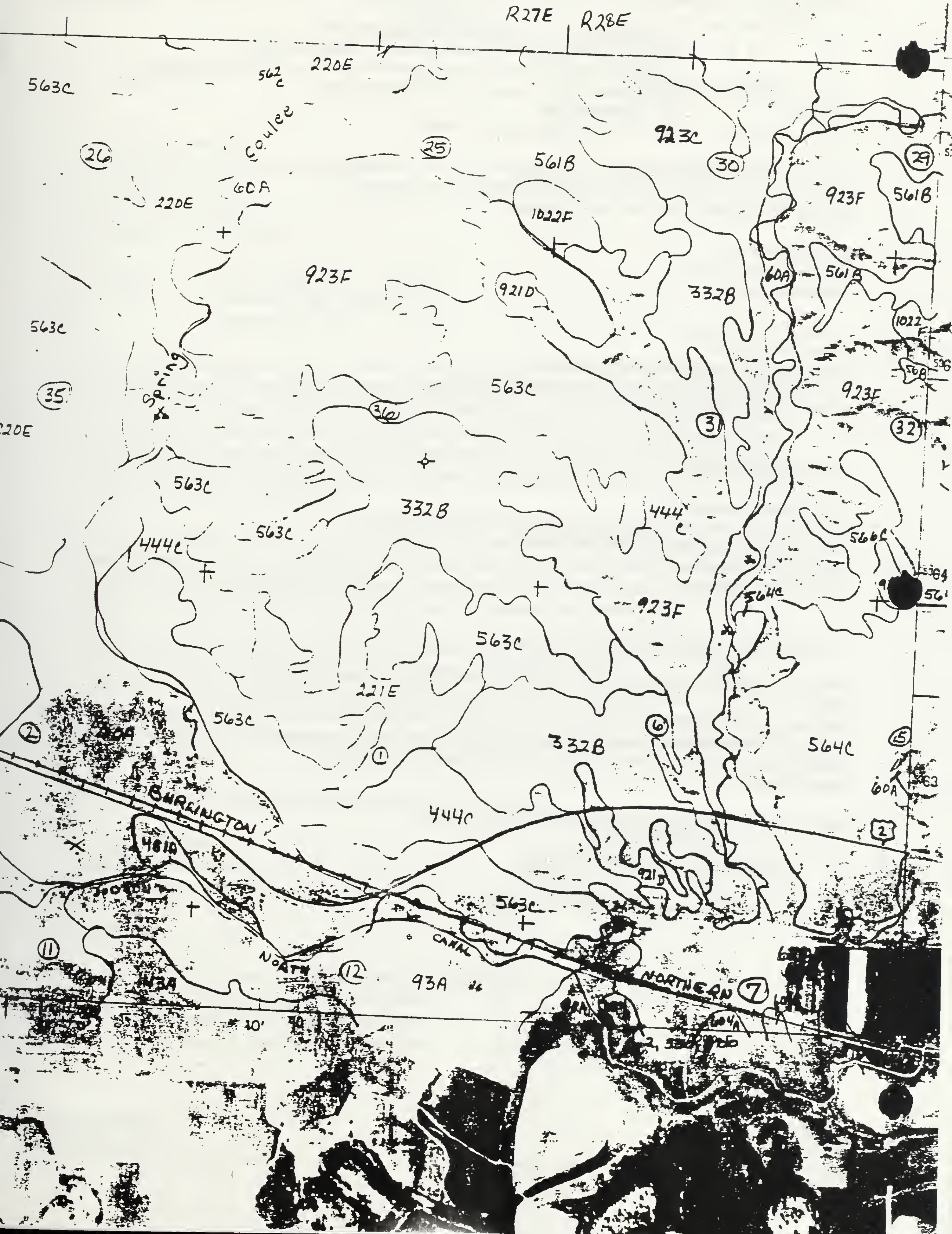
4-25-90 BP
3-29-89 BP
(Joins 129)



4-25-90 BP 1/91
3-28-89 BP
(Joins 37)

(Joins 147)
1/91 BP

38


R27E
R28E
563C
562 C
220E
Coulee
26
25
923C
561B
30
29
923F
561B
220E
60A
1022F
923F
921D
332B
60A
561B
563C
1022 F
56B
35
Spring
220E
563C
36
923F
31
32
563C
332B
444 C
563C
444C
566C
923F
564C
563C
221E
563C
2
1
6
332B
564C
5
60A
444C
2
BURLINGTON
461A
921D
563C
11
NORTH
CANAL
12
93A
NORTHERN
7
604A
10'

From: **"Sickerson, Larry" <lsickerson@state.mt.us>**
To: **"Atkins, Tom" <tatkins@state.mt.us>, "Goettle, Jeremy" <jgoettle@state.mt.us>, "'dan@rpa-hln.com'" <dan@rpa-hln.com>**
Copies to: **"Sickerson, Larry" <lsickerson@state.mt.us>**
Subject: **RE: Dodson-East**
Date sent: **Tue, 27 Aug 2002 09:03:02 -0600**

This project will have no impact on a Piping Plover Nest at Nelson Reservoir. The Nelson Reservoir is over 36-miles to the East of this project. No response from the BoR is needed.

Larry Sickerson
District Project Biologist
Glendive District

-----Original Message-----
From: Atkins, Tom
Sent: Tuesday, August 27, 2002 8:58 AM
To: Goettle, Jeremy; Sickerson, Larry; 'dan@rpa-hln.com'
Subject: FW: Dodson-East

Response from BoR...

-----Original Message-----
From: Richard Blaskovich [mailto:RBLASKOVICH@gp.usbr.gov]
Sent: Tuesday, August 27, 2002 8:54 AM
To: tatkins@state.mt.us
Subject: Dodson-East

** Routed Mail. Please reply when completed **

We have reviewed the document in the Bureau of Reclamation, Montana Area Office
and only have one addition.
On page 54 you refrence sites where piping plover nest. Nelson Reservoir has piping plover nesting and was included as critical habitat by the Fish and Willife Service.

Do you need an official response or will this email suffice?

: MDT

MDT
serving you with pride
Montana Department of Transportation
2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001
David A. Galt, Director
Judy Martz, Governor

MASTER FILE
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ENVIRONMENTAL

May 29, 2001

Dr. Mark Baumler
State Historic Preservation Office
1410 8th Avenue
P.O. Box 201202
Helena, MT 59620-1202

Subject: NH 1-8(15)454
[Dodson - East Update]
Control No. 1516

Enclosed is the updated cultural resource report for the above proposed MDT project in Phillips County. The original cultural resource report for Dodson – East was submitted to your office in June, 1993; this document constitutes an update of that original report. In 1993 your office concurred with our determination that the following properties were eligible for the National Register of Historic Places: the Great Northern Railway Main Line (24PH3118), Dodson Mercantile Company Building (24PH3121), and the C. E. and Ethel Taylor House (24PH3123).

The 2001 update revisited the above sites. There had been significant changes to only one of them, the C. E. and Ethel Taylor House. Since 1993, the property has been relocated, and converted into a garage. Consequently, the property does not retain sufficient to qualify for the National Register; we request your concurrence.

Finally, this report includes two sites that attained the 50 year age criteria since 1993. Only one, the Cowboy Bar (24PH3576) is recommended as eligible for the National Register. We agree with that recommendation and request your concurrence. Also, the Dodson Pump Canal Waste Way (24PH1849 addendum) is included in the Area of Potential Effect. The site is a contributing component of the Bureau of Reclamation's Milk River Project.

If you have any questions, please contact me at 444-6258.

Jon Axline
Jon Axline, Historian
Environmental Services

CONCUR
MONTANA SHPO
6/11/2001 SIGNED

Enclosure

cc: Bill McChesney, Glendive District Administrator
Carl Peil, P.E., Preconstruction Bureau
Gordon Stockstad, Resources Bureau
Bill Vincent, Bureau of Reclamation w/attachment

2001111522

JOSEF
MDT

MDT
serving you with pride
Montana Department of Transportation
2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001

David A. Galt, Director
Judy Martz, Governor

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ENVIRONMENTAL

November 13, 2001

Dr. Mark Baumler
State Historic Preservation Office
1410 8th Avenue
P.O. Box 201202
Helena, MT 59620-1202

RECEI D
BY:

Subject: F 1-8(15)454 E
Dodson - East
Control No. 1516

Enclosed is the Determination of Effect for the above project in Phillips County. We have determined that the proposed project would have **No Effect** to the National Register-eligible Great Northern Railway Main Line (24PH3118), the Dodson Mercantile Company Building (24PH3121) and the Cowboy Bar (24PH3576). It would have **No Adverse Effect** to the Dodson Pump Canal Waste Way (24PH1849 addendum) for the reasons specified in the document. We request your concurrence.

If you have any questions, please contact me at 444-6258.

Jon Axline

Jon Axline, Historian
Environmental Service

CONCUR
MONTANA SHPO
DATE 27 Nov 2001 SIGNED

Enclosures

cc: Bill McChesney, Glendive District Administrator
Carl Peil, P.E., Preconstruction Bureau
Gordon Stockstad, Resources Bureau

file: MDT/2001

DETERMINATION OF EFFECT

F 1-8(15)454 F
Dodson – East
Control No. 1516

Introduction

The Montana Department of Transportation (MDT) intends to reconstruct 4.5± miles of U.S. Highway 2 in Phillips County, Montana. The project begins at the Bureau of Reclamation's Dodson North Canal (24PH3128) in Dodson (Milepost 454.1) and extends 4.5 miles easterly, through Dodson, to Milepost 458.6±. The existing roadway was constructed under two projects in 1949 and 1963 and has received periodic overlays. The existing roadway is 40± feet wide through Dodson (MP 454.1 – 454.4), 26± feet wide from MP 454.4 to 457.7, and 32± feet wide from MP 457.7 to the end of the project area. Figure 1 shows the project area.

The Dodson – East project would generally follow the existing alignment, except between Milepost 455.0± to 456.6± where it would be shifted to the south to avoid encroaching on the existing Burlington Northern-Santa Fe Railroad Right-of-Way (R/W). It is the intent of the project to reconstruct the roadway to a 39± foot paved surface, including two 12± foot driving lanes, rumble strips, and two 7± foot paved shoulders. Between MP 454.1 to 454.4 the existing 40± paved top-width would be perpetuated. New R/W would be required for this project.

Significant Cultural Resources

A cultural resource survey of the project area was conducted in 1993 and 2000. The MDT and the Montana State Historic Preservation (SHPO) concurred in the National Register of Historic Places (NRHP) eligibility of three historic sites: the Great Northern Railway Main Line (24PH3118), the Dodson Mercantile Company Building (24PH3121), and the Cowboy Bar (24PH3576). Also included in the Area of Potential Effect (APE) for this project is the Dodson Pump Canal Waste Way (24PH1849 addendum), a contributing component of the Bureau of Reclamation's Milk River Project.

Constructed in 1887, the Great Northern Railway Main Line is a 4.3-mile section of single railroad track with a passing siding, grain elevator spur and two bridges. Because of the Great Northern's impact on the development of northern Montana, the segment of railroad line within the project area is eligible for the NRHP under Criterion A and C.

The Dodson Mercantile Company Building was constructed in 1910 and is a good representative example of a one-story, false-front commercial building. It is the oldest remaining commercial building in Dodson and is representative of early 20th century vernacular commercial architecture. It is eligible for the NRHP under Criteria A and C.

The Cowboy Bar was constructed in 1951and consists of a single vernacular-style commercial building with a false front. The bar is eligible for the NRHP under Criterion A for its association with the commercial and social history of Dodson and under Criterion C for its high degree of architectural integrity.

MONTANA DEPARTMENT OF TRANSPORTATION

FEDERAL AID PROJECT NO. F 1-8(15)454 F
GRADE, GRAVEL, PL. MIX SURF. & STRUCTURE
DODSON - EAST
PHILLIPS COUNTY

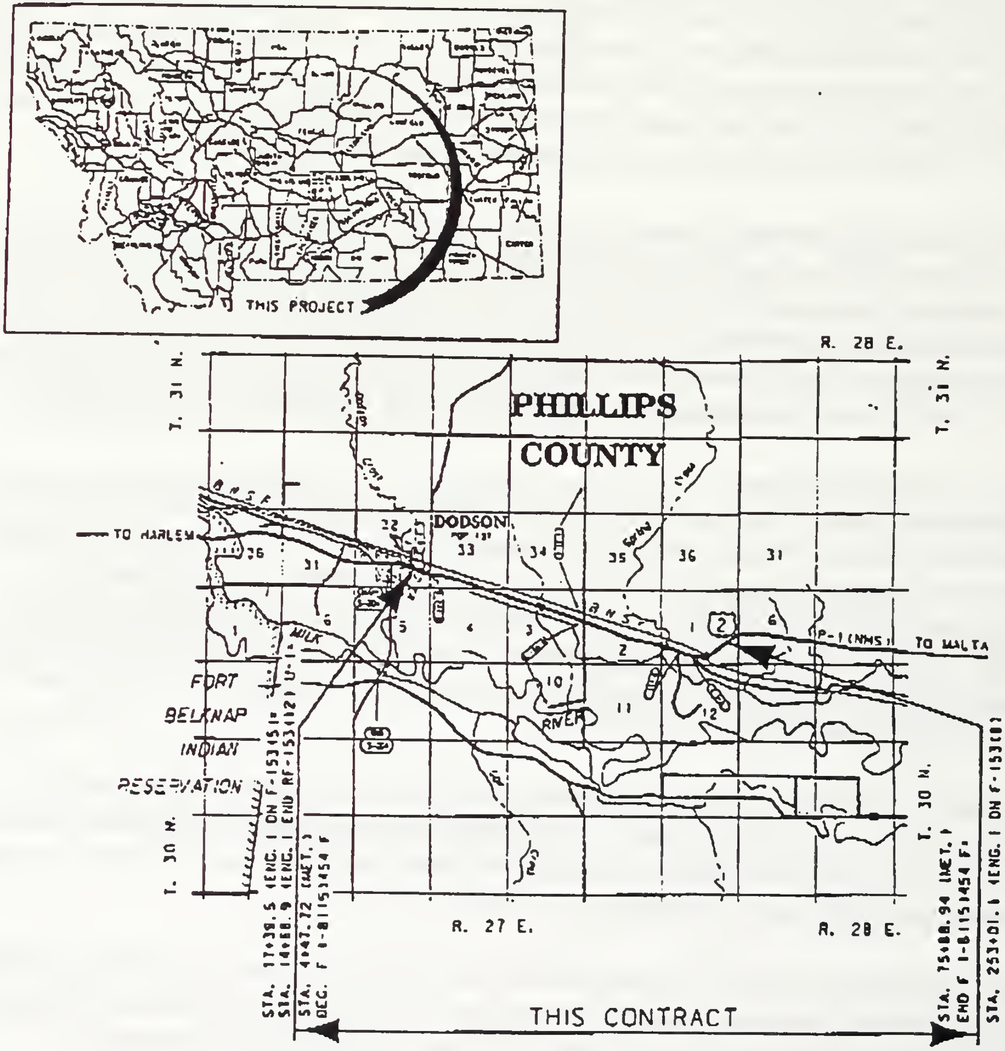


Figure 1. Map showing the location of the MDT's Dodson – East project.

Project Impact

A preliminary design of the Dodson – East project has been completed and a copy of the plans in the vicinity of the historic sites in Dodson is attached (Figure 2).

The existing Great Northern Railway Main Line (24PH3118) would be perpetuated as a result of the proposed MDT project. The MDT would not encroach on the existing railroad R/W and there would be no removal, relocation or encroachment by the MDT on any of the railroad's associated structures. Indeed, the MDT's proposed alignment would be shifted away from the railroad to maintain a specified distance between it's R/W and that of the MDT.

The 40± foot roadway width would be perpetuated in Dodson at the Dodson Mercantile Company Building (24PH3121). The existing centerline would be perpetuated through the community as would the existing roadway width. Curb and gutter, however, would be constructed as would new sidewalks. Sidewalks already existing in the front of the building and no additional R/W would be required for either the curb and gutter or sidewalks.

The 40± foot roadway width would be perpetuated in Dodson at the Cowboy Bar (24PH3576). The existing centerline would be perpetuated through the community as would the existing roadway width. Curb and gutter, however, would be constructed as would new sidewalks. Sidewalks already existing in the front of the building and no additional R/W would be required for either the curb and gutter or sidewalks.

The MDT and the Bureau of Reclamation would relocate approximately 951± feet of the Dodson Pump Canal Waste Way (24PH1849 addendum) where it parallels Highway 2. The canal would be shifted to the south to relocate the facility away from the proposed roadway. The Bureau of Reclamation would design the new canal and acquire the necessary R/W. The Bureau would also hire the contractor to move the canal.

Project Effect

There would be **No Effect** to the NRHP-eligible Great Northern Railway Main Line (24PH3118). The existing railroad alignment would be perpetuated and there would be no Right-of-Way of construction permits required at the site. The site would remain unchanged and maintain its existing function as an active railroad. The characteristics that make the site eligible for the NRHP would remain intact and there would be no change to the setting or function of the property.

There would be **No Effect** to the Dodson Mercantile Company Building (24PH3121) and the Cowboy Bar (24PH3576). The existing centerline and roadway width would be perpetuated through the community. Although new curb and gutter would be installed, it would not encroach on the properties' boundaries and no R/W would be required. The curb and gutter would not change the appearance of significantly change the setting of either building. The existing concrete sidewalk is deteriorated and would be replaced by a new facility. The characteristics that make the sites eligible for the NRHP would be perpetuated and there would be no significant change in their setting.

There would be **No Adverse Effect** to the Dodson Pump Canal Waste Way (24PH1849 addendum). Although the canal would be relocated, its original function would remain intact and it would continue to serve as an overflow channel from the Dodson North Canal. The site's relation with the roadway would also remain basically unchanged as it would be relocated to the south side of the new alignment and would still parallel U.S. Highway 2. There would be a change in the setting of the site, but it would not be adverse. The canal's association with the Milk River Project would be perpetuated as would its more direct association with the Dodson North Canal.

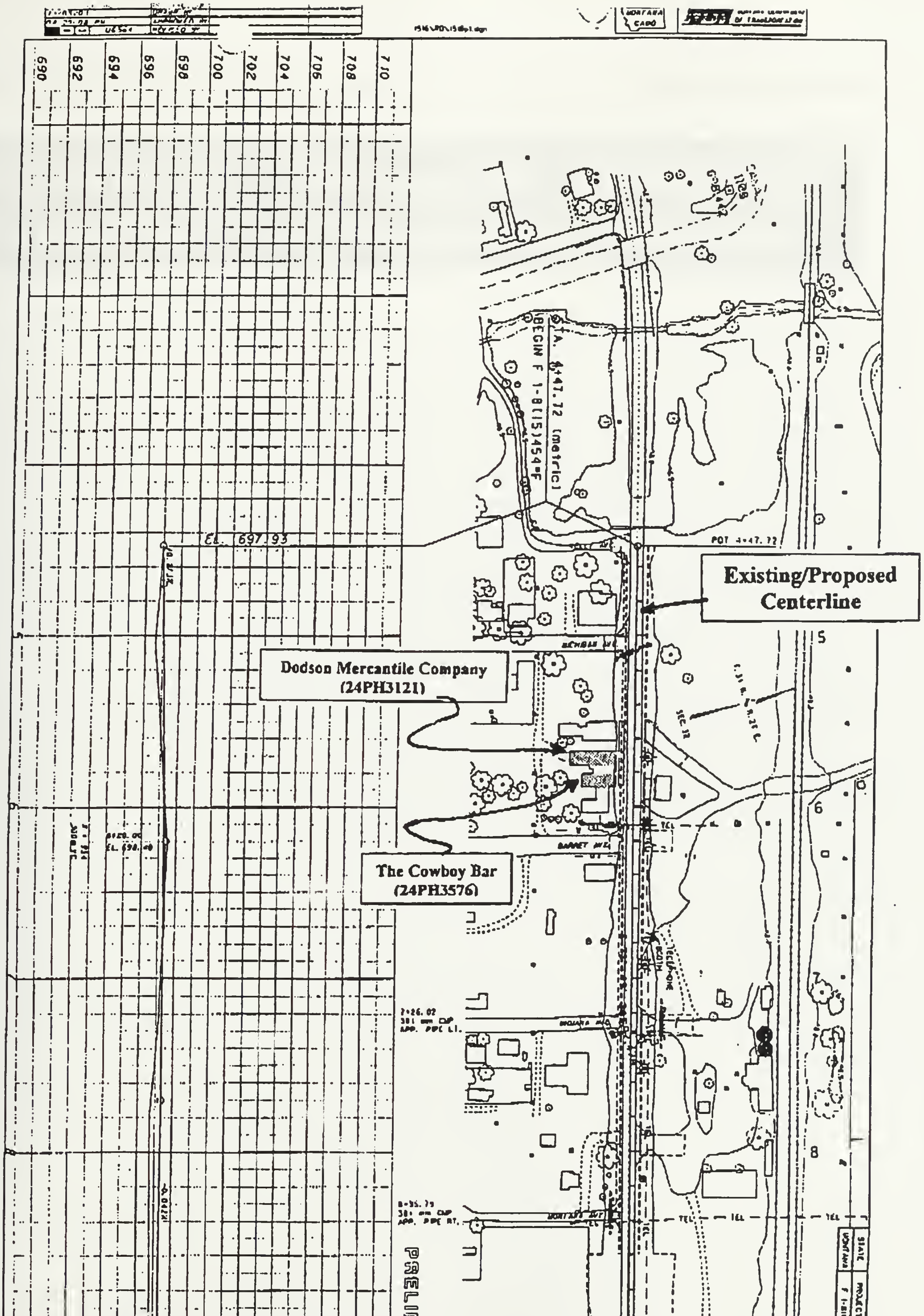


FIGURE 2. MDT PLANS IN THE VICINITY OF THE DODSON HISTORIC SITES

Appendix C: "Nationwide" *Section 4(f)* Evaluations and Supporting Materials

MONTANA DIVISION

"NATIONWIDE" *SECTION 4(f)* EVALUATION FOR MINOR IMPACTS ON HISTORIC SITES EXCLUDING HISTORIC BRIDGE REPLACEMENTS

Project # F 1-8 (15) 454, (P.M.S. C.N.#1516)

Date: November 7, 2002

Project Name: DODSON - EAST

Location: Dodson Pump Canal Wasteway
Addendum to Site 24PH1849
Phillips County, Montana

The Dodson Pump Canal (24PH1849) was constructed along the northern terrace of the Milk River Valley in north-central Montana. The canal begins at a small pumping station north of Dodson and the canal runs in an easterly direction for about 7.5 miles. The canal is an unlined, U-shaped ditch with berms of varying heights on either side. The canal averages about 5 feet wide and 2.8 feet deep. The Dodson Pump Canal (including the wasteway) was constructed in 1946 as part of the Milk River Project. The newly inventoried segment of the canal's wasteway considers only the lower end of the canal's outlet extends from about RP 456.5 (Project Station 42+60) to RP 457.0 (Project Station 50+60). This section of the wasteway includes siphons under the BNSF Railway and US 2, two concrete check-drop structures, two turnouts, and a concrete drop structure near the location where the wasteway empties into the Dodson North Canal. This section of the wasteway was determined eligible for the NATIONAL REGISTER OF HISTORIC PLACES because it retains its original as-built appearance, is in its original location, and its original structures are intact. The wasteway is a contributing element to the Dodson Pump Canal, a resource previously recommended as National Register-eligible.

The proposed project would require the relocation of approximately 350 m (about 1,150 feet) of the Dodson Pump Canal Wasteway. Although the canal would be relocated, its original function would remain intact and it would continue to serve as an overflow channel from the Dodson North Canal. The relationship of the original canal to the highway would be perpetuated since the relocated canal would also parallel the south side of the new road. Although highway-related construction would result in minor changes to the appearance of lands adjoining the Dodson North Canal and Dodson Pump Canal Wasteway, these changes in "setting" would not be adverse. The canal's association with the Milk River Project and its connection to the Dodson North Canal would be perpetuated.

A map showing the location of the surveyed section of 24PH1849 is attached.

NOTE: *Any response in a box requires additional information. Consult the "Nationwide" Section 4(f) Evaluation criteria.*

		YES	NO
1.	Is the *4(f)* site adjacent to the existing highway?	X	☐
2.	Does the proposed project require the removal or alteration of historic structures, and/or objects?	☐	X
3.	Does the proposed project disturb or remove archaeological resources which are important to preserve in-place rather than to recover?	☐	X
4.	Is the impact on the *4(f)* site considered minor (i.e.: no effect; or no adverse effect)? **There will be no adverse effect to 24PH1849.**	X	☐
5.	Has the STATE HISTORIC PRESERVATION OFFICE (SHPO) agreed in writing with the assessment of impacts, and the proposed mitigation?	X	☐
6.	Is the proposed action under an Environmental Impact Statement (E.I.S.)?	☐	X
7.	Is the proposed project on a new location? **The new road will be built south of the existing road and Dodson North Canal from RP 454.5 until crossing the existing highway near RP 457.9. The new road will then be on the north side of US 2 before crossing the BNSF and rejoining the existing highway at RP 458.3 (the end of the project).**	☒	

***NOTE**: Any response in a box requires additional information. Consult the "Nationwide" Section 4(f) Evaluation criteria.*

8. The Scope-of-Work for the proposed project is one of the following: X ☐
   - a **Improved traffic operation**;
   - b) **Safety improvements**;
   - c) 3R;
   - d) Bridge replacement on essentially the same alignment; or
   - e) Addition of lanes.

ALTERNATIVES CONSIDERED

YES NO

1. The "do-nothing" **ALTERNATIVE** has been evaluated, and is not considered to be feasible and prudent. **(SEE Part III of the EA)** X ☐

The existing roadway and its bridges have physical deficiencies that contribute to reduced safety for users of US 2. The road's substandard width and presence of obstructions within the clear zone are related to the design of the roadway and can be corrected only by reconstruction.

2. An **ALTERNATIVE** has been evaluated on the existing alignment which improves the highway without any *4(f)* impacts, and is also not considered to be feasible and prudent. **(SEE Part III of the EA)** X ☐

Rebuilding US 2 on the existing alignment would be possible. However, the Dodson North Canal lies within the required clear zone for the existing highway and presents a safety hazard for highway users. Widening the road on the existing alignment would not eliminate this hazardous condition. Building a new overpass would still be required.

MDT considered an alignment that involved a slight shift in the road's location and would have produced a new road that would closely match the alignment of the existing highway. However, the alternate would require the relocation of the existing overhead power line that parallels US 2 at this location and would place the highway closer to the BNSF Railroad. Shifting the highway toward the BNSF creates concerns over safety due to the decreased distance between the highway and railroad. The BNSF advocates maintaining a minimum distance of 50 feet between the centerline of the main track and the adjacent highway right-of-way. Meeting this minimum offset distance would not be possible if the new road were built near the existing alignment.

3. An **ALTERNATIVE** on a new location avoiding the *4(f)* site has been evaluated, and is not considered to be feasible and prudent. **(SEE Part III of the EA)** X ☐

Reconstructing US 2 on a new location north of the BNSF Railroad was another alignment alternate considered but rejected by MDT. To accomplish this, a new railroad overpass would need to be built just east of Dodson. MDT eliminated this alternate from consideration due concerns over the ability to provide adequate clearance over the BNSF Railroad at the required overpass location at approximately RP 454.7. This alternate would require a crossing of the Dodson Pump Canal.

MDT also considered the option of shifting the alignment of the highway to bench lands north of the railroad and Dodson. US 2 could be developed on a totally new alignment beginning about 2.5 miles west of Dodson and bypassing the community to the north. This option would also require a new bridge crossing of the railroad somewhere west of Dodson. This option would extend the project length by about 3.7 miles. MDT rejected this alternate due to the substantial increase in project length (and related costs) of the facility and the potential for creating environmental impacts greater than those associated with other proposed alignment alternates. The Town of Dodson was also adamantly opposed to a bypass alignment. This alternate would also require a crossing of the Dodson Pump Canal.

NOTE: *Any response in a box requires additional information. Consult the "Nationwide" Section 4(f) Evaluation criteria.*

ALTERNATIVES CONSIDERED (Continued)

MDT also considered an alignment that would place the new the road slightly south of the existing highway and relocate about 2.2 km (1.4 miles) of the Dodson North Canal. The roadway would maintain its present alignment through the community of Dodson. East of the community, the road's location would be shifted southerly and partially developed over lands presently occupied by the canal. This alignment would not require bridges across the Dodson North Canal but a new railroad overpass would be required. MDT rejected this option because of issues and costs associated with relocating the Dodson North Canal.

MINIMIZATION OF HARM

	YES	NO
1. The proposed project includes all possible planning to minimize harm.	X	☐
2. Measures to minimize harm include the following:	X	☐

MDT's preliminary design for US 2 in the vicinity of the Dodson Pump Canal Wasteway shows that the anticipated construction limits would generally be parallel to and more than 40 m (131 feet) south of the wasteway. Construction limits would be near the wasteway at the location where the irrigation feature ties into the Dodson North Canal. The required structure across the Dodson North Canal would be designed to avoid or minimize disturbance to the wasteway and the associated drop structure at this location. MDT would also ensure that disturbed areas are revegetated as soon as practical after construction of the new highway.

COORDINATION

1. The proposed project has been **COORDINATED** with the following:

	YES	NO
a) SHPO **(June 11, 2001 and July 12, 2001)**	X	☐
b) ADVISORY COUNCIL ON HISTORIC PRESERVATION	___	☒
c) Property owners **(Public meeting November 18, 2001)**	X	___
d) Local/State/Federal agencies **Bureau of Reclamation -- provided with copy of EA/cultural resources report**	X	☐

2. One of the preceding had the following comment(s) regarding this proposed project, and/or the mitigation:

SHPO concurred with NRHP eligibility determinations for the Dodson Pump Canal Wasteway (24PH1849) on June 11, 2001.

SHPO concurred with a Determination of No Adverse Effect for impacts on the Dodson Pump Canal Wasteway on November 27, 2001.

SUMMARY

The proposed action is preferred because the No Build Alternative does not satisfy the specified purpose and need for improving US 2 east of Dodson. The No Build Alternative does not meet the traveling public's needs because it does not address the deficient surface width associated with the road and its bridges and does not eliminate or reduce the hazard associated with the existence of the Dodson North Canal within the clear zone of the roadway. The No Build Alternative does not provide a traffic facility consistent with all design standards for National Highway System routes like US 2.

Rebuilding the road on an alignment similar to that of the existing highway does not eliminate the traffic safety hazard to motorists presented by the Dodson North Canal. Building on an alignment near the present highway would result in an unacceptable encroachment on the BNSF Railway. Such an alternative would not allow MDT to meet the railroad's generally accepted minimum offset distance of 50 feet between the centerline of the main track and the adjacent highway right-of-way. Building US 2 on other alignments to the north of the BNSF Railway could cause extraordinary environmental impacts and/or substantially increase engineering and construction costs and would require crossings of the Dodson Pump Canal, a NRHP-eligible property. The reasons for making these conclusions are provided in Part III of the EA. Therefore, no feasible and prudent alternatives exist to avoid the minor effects associated with reconstructing US 2 adjacent to the lower section of the Dodson Pump Canal Wasteway (24PH1849).

Part III of the attached Environmental Assessment describes the alternatives considered by MDT and the analysis used to identify a preferred alternative for this proposed project. The proposed action meets all criteria regarding the required **Alternatives**, **Coordination**, and **Measures to Minimize Harm**. All possible planning to minimize harm to the Dodson Pump Canal Wasteway has been undertaken and will be incorporated in this proposed project. This proposed project therefore complies with the December 23, 1986 Final Nationwide *Section 4(f)* Evaluation by the U.S. DEPARTMENT OF TRANSPORTATION's Federal Highway Administration.

APPROVAL

This document is submitted pursuant to **49 U.S.C. 303** and in accordance with the provisions of **16 U.S.C. 470f**.

Jean A. Riley
Date: 11/19/02
Jean A. Riley, P.E.
Engineering Section Supervisor
MDT Environmental Services

Approved: Darin Grenfell
Federal Highway Administration
Date: 11/25/02

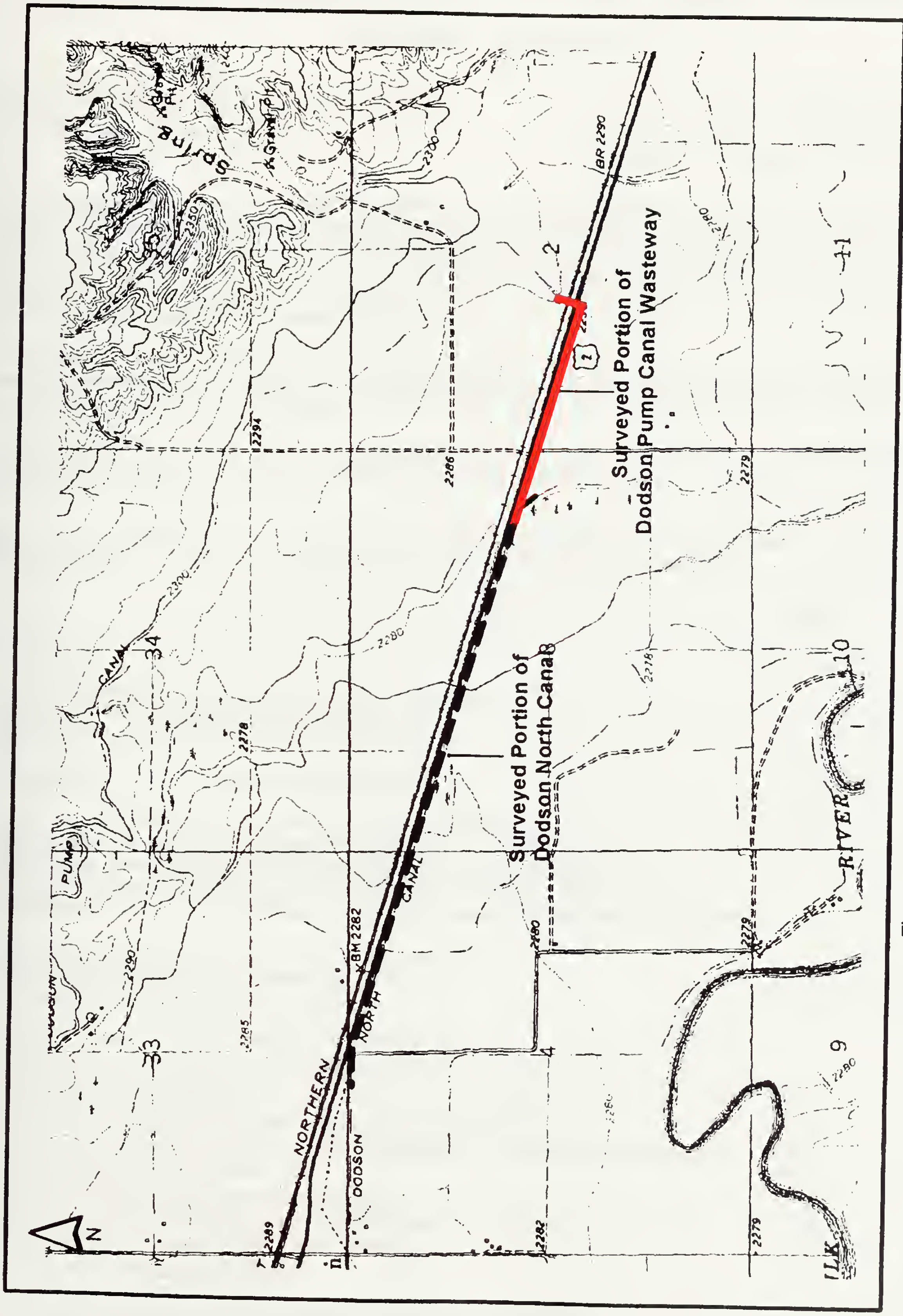


Figure 16. Location map of the inventoried canal segments

MONTANA DIVISION

"NATIONWIDE" PROGRAMMATIC *SECTION 4(f)* EVALUATION FOR HISTORIC BRIDGES

Project #: F 1-8(15) 454; (P.M.S. C#1516)
Project Name: Dodson - East

Date: November 7, 2002
Description: BNSF Railway Overpass
Location: Phillips County, Montana

This proposed project would realign and widen approximately 7.2 km (4.5 miles) of US 2 east of the Town of Dodson. As part of the planned highway improvements, a new railroad overpass structure would be built to cross over the present day Burlington Northern Santa Fe Railway (BNSF) main line at RP 458.3 near the east end of the project. The new overpass would be located slightly north of the existing structure. The newly aligned section of US 2 would tie into the existing alignment about 400 m (1,300 feet) east of the present railroad overpass structure.

The existing overpass, built in 1936, is a 5-span, concrete structure that is 56.7 m (186 feet) long and 7.3 m (24 feet)wide. No NRHP-eligibility determination has been made for this structure under the terms of the existing Programmatic Agreement with the FHWA, the SHPO, and ACHP.

The attached Environmental Assessment (EA) include maps, text, and photographs describing the proposed project and the location of the BNSF Railway Overpass.

NOTE: *Any response in a box will require additional information, and may result in an individual evaluation/statement. Consult the "Nationwide" Section 4(f) Evaluation procedures.*

	YES	NO
1. Is the bridge a NATIONAL HISTORIC LANDMARK?	☐	X
2. Have agreements been reached through the procedures pursuant to *Section 106* of the *National Historic Preservation Act (NHPA)* with the following:		
STATE HISTORIC PRESERVATION OFFICE (SHPO)?	X	☐
ADVISORY COUNCIL ON HISTORIC PRESERVATION (ACHP)?	X	☐

MDT's historic roads and bridges Programmatic Agreement with the FHWA, the SHPO, and ACHP was enacted in lieu of regular procedures for compliance with *Section 106* of the *NATIONAL HISTORIC PRESERVATION ACT* as applied only to historic roads and bridges in Montana.

	YES	NO
3. Any other agency/ies with jurisdiction at this location?	X	___
a) If "YES" will additional approval(s) for this *Section 4(f)* application be required?	☐	X
b) List of agencies with jurisdiction at this location:		
USA - Corps of Engineers (*Section 404* Permit **required**)	X	___
USDA - Forest Service	☐	X
USDA - Natural Resources Conservation Service (*FPPA*)	☒	___
FEMA Regulatory Floodway (**County Floodplain Development Permit**)	☒	___
MDFW&P - Parks Division	☐	X
MDFW&P - Wildlife Division (wetlands)	☐	X
MDFW&P - Fisheries Division - ***124SPA* permit required**	☒	___
MDNR&C (navigable rivers under state law)	☐	X
MDNR&C (irrigation systems)	☐	X
MDEQ - Air Quality Division	_	X
MDEQ - Permitting and Compliance **- MPDES Compliance**	X	___
Other:	___	X

NOTE: *Any response in a box will require additional information, and may result in an individual evaluation/statement. Consult the "Nationwide" Section 4(f) Evaluation procedures.*

ALTERNATIVES & FINDINGS

EACH of the following **ALTERNATIVES** for this proposed project have been evaluated to avoid the use of the historic bridge:

1. "Do Nothing."
2. Rehabilitate the existing bridge without affecting the historic integrity of the structure in accordance with the provisions of *Section 106* in the *NHPA*.
3. Construct the proposed bridge at a location where the integrity of the existing historic structure will not be affected as determined by the provisions of the *NHPA*.

The above **ALTERNATIVES** have been applied in accordance with this PROGRAMMATIC *SECTION 4(f)* EVALUATION and are supported by **EACH** of the following **FINDINGS:**

	YES	**NO**
1. The "Do Nothing" **ALTERNATIVE** has been evaluated and has been found to ignore the basic transportation need at this location.	X	☐
This **ALTERNATIVE** is neither feasible nor prudent for the following reasons:		
a) Maintenance — this **ALTERNATIVE** does not correct the structurally deficient condition and/or poor geometrics (clearances, approaches, visibility restrictions) found at the existing bridge. Any of these factors can lead to a sudden catastrophic collapse, and/or a potential injury including loss of life. Normal maintenance will not change this situation.	X	☐
b) Safety — this **ALTERNATIVE** also does not correct the situation which causes the existing bridge to be considered deficient. Because of these deficiencies, the existing bridge presents a serious and unacceptable safety hazard to the traveling public and/or places intolerable restrictions (gross vehicle weight, height, and/or width) on transport. **The existing bridge has a Sufficiency Rating of 33.0 according to MDT's most recent bridge inspection report. The overpass does not meet MDT's standard for roadway width (12.0 m or greater) on NHS Routes.**	X	☐
A copy of the MDT Bridge Bureau's Inspection Report for the bridge is attached. **See APPENDIX C.**	X	☐

2. The rehabilitation **ALTERNATIVE** has been evaluated with one or more of the following **FINDINGS**:

	YES	**NO**
a) The existing bridge's structural deficiency is such that it cannot be rehabilitated to meet minimum acceptable load and traffic requirements without adversely affecting the structure's historic integrity.	X	
b) The existing bridge's geometrics (height, width) cannot be changed without adversely affecting the structure's historic integrity.	X	
c) This **ALTERNATIVE** does not correct the serious restrictions on visibility(approach geometrics, structural requirements) which also contributes to an unsafe condition at this location.	X	
Is this rehabilitation **ALTERNATIVE** therefore considered to be feasible and/or prudent based on the preceding evaluations?	☐	X

ALTERNATIVES & FINDINGS (continued)

NOTE: *Any response in a box will require additional information, and may result in an individual evaluation/statement. Consult the "Nationwide" Section 4(f) Evaluation procedures.*

	YES	NO
3. The relocation **ALTERNATIVE**, in which the new bridge has been moved to a site that presents no adverse effect upon the existing structure has also been considered under the following **FINDINGS**:		
a) Terrain and/or local geology. The present structure is located at the only feasible and/or prudent site for the bridge on the existing route. Relocating to a new site — either up-, or downstream of the preferred location — will result in extraordinary bridge/approach engineering and associated construction costs.		X
The preferred site is the only prudent location due to the terrain and/or geologic conditions in the general vicinity.		X
Any other location would cause extraordinary disruption to existing traffic patterns.		X
b) Significant social, economic and/or environmental impacts. Locating the proposed bridge in other than the preferred site would result in significant social/economic impacts such as the displacement of families, businesses, or severing of prime/unique farmlands.		X
Significant environmental impacts such as the extraordinary involvement in wetlands, regulated floodplains, or habitat of threatened/endangered species are likely to occur in any location outside the preferred site.		X
c) Engineering and economics. Where difficulty/ies associated with a new location are less extreme than those listed above, the site may still not be feasible and prudent where costs and/or engineering difficulties reach extraordinary magnitudes. Does the **ALTERNATE** location result in significantly increased engineering or construction costs (such as a longer span, longer approaches, etc.)?		X
d) Preservation of existing historic bridge may not be possible due to either or both of the following:		
the existing structure has deteriorated beyond all reasonable possibility of rehabilitation for a transportation or alternative use;		X
no responsible party can be located to maintain and preserve the historic structure.	**Advertisement for Adoption PENDING**	

The BNSF Railway Overpass will be made available for any "responsible party/ies" under MDT's Adopt-a-Bridge program. If efforts to adopt the structure in-place are unsuccessful, the old bridge would be demolished.

	YES	NO
Therefore, in accordance with the previously-listed FINDINGS it is neither feasible nor prudent to locate the proposed bridge at a site other than the preferred **ALTERNATE** as described.		[X]

MDT has identified a viable alignment for a new overpass just north of the existing structure.

MEASURES TO MINIMIZE HARM

NOTE: *Any response in a box will require additional information, and may result in an individual evaluation/statement. Consult the "Nationwide" Section 4(f) Evaluation procedures.*

This "Nationwide" Programmatic *Section 4(f)* Statement applies only when the following **Measures to Minimize Harm** have been assured; a check in a box MAY void the Programmatic application — if so, a full *Section 4(f)* Evaluation **will be required**:

	YES	NO
1. Is the bridge being rehabilitated under this proposed project?		X
Rehabilitating this bridge was eliminated from further consideration since this alternative would not provide a facility capable of accommodating MDT's standard roadway width of 12.0 m (or greater) for NHS Routes. Rehabilitating the existing overpass is not a viable action based on MDT's decision to shift the location of US 2 in the vicinity of the overpass.		
If "YES", is the historic integrity of the structures being preserved to the greatest extent possible; consistent with unavoidable transportation needs, safety, and load requirements?	Not applicable	
NOTE: If "NO", refer to item 2., following, to determine Programmatic applicability.		
2. The bridge is being replaced, or rehabilitated to the point where historic integrity is affected. Are adequate records being made of the existing structures under HISTORIC AMERICAN ENGINEERING RECORD standards, or other suitable means developed through consultation with SHPO and the ACHP?	X	☐
If an adopting party cannot be found, MDT will record the structure to HAER standards.		
3. If the bridge is being replaced, is the existing structure being made available for alternative use with a responsible party to maintain and preserve same?	X	☐
MDT will advertise the bridge for adoption under the Adopt-A-Bridge Program.		
4. If the bridge is being adversely affected, has agreement been reached through the *Section 106* process of the *National Historic Preservation Act* on these **Measures to Minimize Harm** (which will be incorporated into the proposed project) with the following:	Not applicable	

COORDINATION

There has been additional **COORDINATION** with the following agencies regarding this proposed project (other than those listed previously):

City/County government: **Yes, meetings with Dodson Town Council during project development.**
Local historical society:
Adjacent property owners: **Yes, individual landowner contacts by MDT during project development.**
Others:

This proposed project is also documented as an **Environmental Assessment** under the requirements of the *National Environmental Policy Act* (**42 U.S.C. 4321**, *et seq.*).

SUMMARY

The No Build Alternative does not satisfy the specified purpose and need for improvements within the Dodson-East project area. The existing overpass is nearly 70 years old and has a Sufficiency Rating of 33.0 (see Part II in the EA). The No Build Alternative does not meet the traveling public's needs because it fails to provide a facility capable of meeting MDT's standard roadway width of 12.0 m or greater for NHS Routes and would not improve the alignment of US 2 on the approaches to the railroad overpass.

Rehabilitating the existing overpass is not a viable action based on MDT's decision to shift the location of US 2 west of the overpass.

MDT concluded that building a new railroad overpass slightly north of the present structure was the only viable alternative for the Dodson-East project. If an adopting party cannot be found for the existing bridge, this proposed project would result in a use of the old BNSF Railway overpass since the structure would be demolished.

The proposed action meets all criteria regarding the required **ALTERNATIVES**, **FINDINGS**, and **MEASURES TO MINIMIZE HARM** which will be incorporated into this proposed project. All possible planning to minimize harm to 24MA1696 has been undertaken. This proposed project therefore complies with the July 5, 1983 Programmatic *Section 4(f)* Evaluation by the U.S. DEPARTMENT OF TRANSPORTATION's Federal Highway Administration.

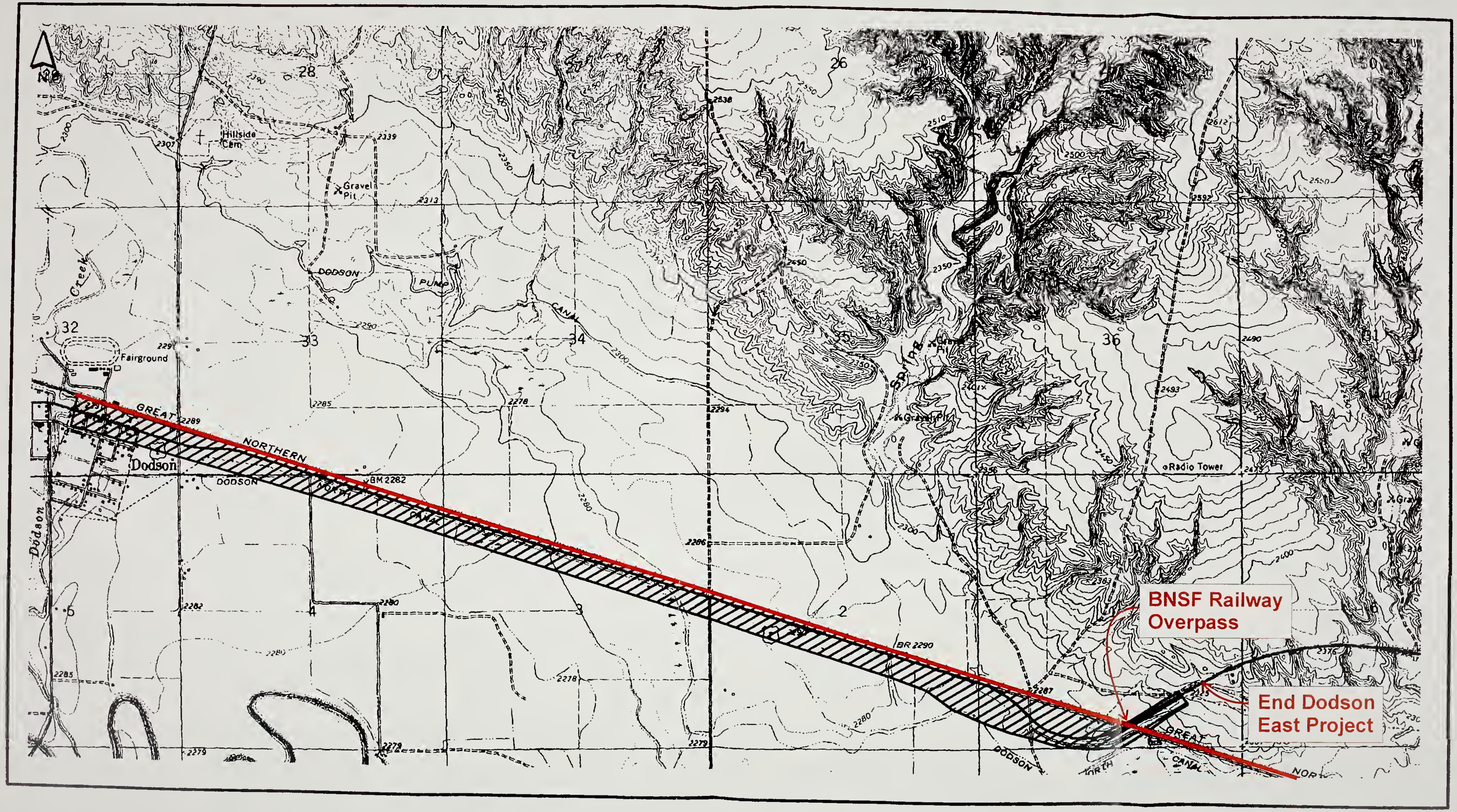
APPROVAL

This document is submitted pursuant to **49 U.S.C. 303** and in accordance with the provisions of **16 U.S.C. 470f**.

______________________________ Date: ____________________

Jean A. Riley, P.E.
Engineering Section Supervisor
MDT Environmental Services

Approved: ______________________________ Date: ____________________
Federal Highway Administration



Location BNSF Railway Overpass

General Information											Inspection Summary				Construction Data			
Bridge Number	On/Off Sys	On Und	Par Str	Structure Name	Km Post	Mile Post	Signed Route	Approximate Location	Highway Division	Name of Feature Crossed	County	Last Insp Date	Suff Rate	Health Index	Structure Sufficiency Status	Year Built	Year Recon	Project Number	Drawing Number
Route P00001																			
P00001427+09391.	On		N	none	688.69	427.93	U.S 00002	FORT BELKNAP AGENCY	HAVRE	MILK RIVER	BLAINE	Aug-2000	63.0	93.2	Not Deficient	1964		F 152-7	6081
P00001432+05001	On		N	MDT Section 32-02	696.00	432.47	U.S 00001	4 M SE FT BELKNAP	HAVRE	DRAINAGE	BLAINE	Dec-2001	41.3	98.5	Not Applicable	1992		F 1-7(9)340	
P00001442+08001	On		N	MDT Section 32-02	712.62	442.80	U.S 00002	11M W DODSON	HAVRE	WHITE BEAR CREEK	BLAINE	Dec-2001	85.6	99	Not Deficient	1993		F 1-7(9)430	14808
P00001446+10161	On		N	none	717.78	446.01	U.S 00002	6M W DODSON	WOLF POINT	PEOPLES CREEK OVERFLOW	PHILLIPS	Dec-2000	85.6	100	Not Deficient	1972		F 152-11	9949
P00001447+03621	On		N	none	719.96	447.36	U.S 00002	6M W DODSON	WOLF POINT	PEOPLES CREEK	PHILLIPS	Dec-2000	86.7	99.4	Not Deficient	1972		F 152-11	9954
P00001451+03281	On		N	none	726.33	451.32	U.S 00002	2M W DODSON	WOLF POINT	NELSON CANAL	PHILLIPS	Jun-2001	84.6	100	Not Deficient	1972		F 152-11	9959
P00001451+07601	On		N	none	727.04	451.76	U.S 00002	2M W DODSON	WOLF POINT	MILK RIVER	PHILLIPS	Oct-2000	83.6	99.1	Not Deficient	1972		F 152	9964
P00001453+03801	On		N	none	729.65	453.38	U.S 00002	1M W DODSON	WOLF POINT	IRRIGATION DITCH	PHILLIPS	Dec-2000	* 84.6	81.1	Not Deficient	1973	1998	F-RF 152(11)U-1	none
P00001454+00361	On		N	none	730.69	454.03	U.S 00002	DODSON	WOLF POINT	USRS/DODSON CANALS	PHILLIPS	Dec-2000	78.1	99.3	Not Deficient	1976		RF 153(12)	11300
P00001456+00301	On		N	none	733.91	456.03	U.S 00002	2M E DODSON	WOLF POINT	DODSON CREEK OVERFLOW	PHILLIPS	Dec-2000	48.1	95.1	Not Deficient	1949		F 153-5	2925
P00001457+06701	On		N	none	736.55	457.67	U.S 00002	3M E DODSON	WOLF POINT	SPRING CREEK	PHILLIPS	Dec-2000	65.8	96.4	Not Deficient	1949		F 153-5	2925
P00001458+03301	On		N	none	737.61	458.33	U.S 00002	4M E DODSON	WOLF POINT	BN RAILROAD	PHILLIPS	Jul-2002	33.0	72	Not Deficient	1936		WPGH 153(B)44	1494
P00001467+06721	On		N	none	752.64	467.67	U.S 00002	4M W MALTA	WOLF POINT	EXETER CREEK	PHILLIPS	Dec-2000	* 82.7	93.2	Not Deficient	1990		F 1-8(13)467	none
P00001471+06661	On		N	none	759.06	471.66	U.S 00002	MALTA	WOLF POINT	MILK RIVER	PHILLIPS	Jul-2002	55.6	80.2	Not Deficient	1952		F 153(6)	3106
P00001485+07431	On		N	none	781.72	485.74	U.S 00002	12M W SACO	WOLF POINT	NELSON CANAL	PHILLIPS	Dec-2000	80.0	99.7	Not Deficient	1966		F 142-9	7775
P00001490+05771	On		N	none	789.50	490.57	U.S 00002	9M W SACO	WOLF POINT	BEAVER CREEK OVERFLOW	PHILLIPS	Dec-2000	80.9	88.7	Not Deficient	1968		F 142-10	8609
P00001491+08241	On		N	none	791.51	491.82	U.S 00002	7M W SACO	WOLF POINT	BEAVER CREEK OVERFLOW	PHILLIPS	Jan-2001	67.0	96.8	Not Deficient	1968		F 142(15)	8609
P00001492+07001	On		N	none	792.93	492.70	U.S 00002	6M W SACO	WOLF POINT	BEAVER CREEK	PHILLIPS	Jan-2001	70.3	99.5	Not Deficient	1966		F 142(9)	7779
P00001499+01191	On		N	none	803.24	499.11	U.S 00002	W EDGE SACO	WOLF POINT	BEAVER CREEK	PHILLIPS	Jan-2001	42.5	89.7	Not Deficient	1938		F 142 B	1831
P00001501+00671	On		N	none	806.91	501.39	U.S 00002	1M E SACO	WOLF POINT	BEAVER CREEK OVERFLOW	PHILLIPS	Jan-2001	82.1	99.3	Not Deficient	1987		BRF 1-8(11)500	13997
P00001501+04181	On		N	none	807.72	501.89	U.S 00002	2M E SACO	WOLF POINT	BEAVER CREEK OVERFLOW	VALLEY	Jan-2001	* 82.1	98.3	Not Deficient	1987		BRF 1-8(11)500	none
P00001506+06491	On		N	none	815.36	506.64	U.S 00002	6M NW HINSDALE	WOLF POINT	DRAINAGE	VALLEY	Jan-2001	* 82.1	96.7	Not Deficient	1987		BRF 1-8(11)500	none
P00001508+08881	On		N	none	818.96	508.88	U.S 00002	4M NW HINSDALE	WOLF POINT	BEAVER CREEK	VALLEY	Jan-2001	64.5	99.7	Not Deficient	1966		F 148-8	7020
P00001514+07371	On		N	none	828.38	514.73	U.S 00002	2M E HINSDALE	WOLF POINT	MILK RIVER	VALLEY	Oct-2000	65.7	98.9	Not Deficient	1966		F 148-8	7026
P00001514+09431	On		N	none	828.72	514.94	U.S 00002	2M E HINSDALE	WOLF POINT	MILK RIVER OVERFLOW	VALLEY	Jan-2001	81.3	92.9	Not Deficient	1966		F 148-8	7032
P00001517+08091	On		N	none	833.32	517.80	U.S 00002	4M E HINSDALE	WOLF POINT	ROCK CREEK CANAL	VALLEY	Jan-2001	76.1	100	Not Deficient	1996		NH 1-9(31)516	16006
P00001522+03821	On		N	none	840.69	522.38	U.S 00002	9 M E HINSDALE	WOLF POINT	LIME CREEK	VALLEY	Jan-2001	86.3	100	Not Deficient	1996		NH 1-9(31)516	16010

Span Data											Clearance Data						Posting Data						Traffic Data		
Approach Span			Main Span			Deck		Skew	Max Span Length (M)	Total Str Length (M)	Vertical		Horizontal		Number of Lanes	Detour Leng (km)	Posting Status	Inven Rate (mtons)	Oper Rate (mtons)	Trk Typ 1 (tons)	Trk Typ 2 (tons)	Trk Typ 3 (tons)	ADT	Year of ADT	% Trk
No.	Material	Design	No.	Material	Design	Design	Surfacing				Over (M)	Under (M)	Rdwy (M)	Total (M)											
Route P00001																									
			3	5 Prestressed Concrete	02 Stringer/Girder	1 Concrete-Cast-in-Place	1 Monolithic Concrete	15	21.95	65.23		0.00	8.60	9.76	2	199.00	5 At/Above Legal Loads	32.6	38.1				4,260	2000	2%
			2	3 Steel	19 Culvert	N N/A (NBI)	N N/A (no deck (NBI))	20	2.41	6.2		0.00	9.14	0.00	2	0.00	0 >39.9% below	-1	-1				1,140	2000	2%
			3	5 Prestressed Concrete	02 Stringer/Girder	1 Concrete-Cast-in-Place	0 None	0	13.72	41.3		0.00	12.15	12.89	2	161.00	5 At/Above Legal Loads	32.6	32.6				980	2000	2%
			2	5 Prestressed Concrete	02 Stringer/Girder	1 Concrete-Cast-in-Place	1 Monolithic Concrete	0	19.81	40.54		0.00	13.26	14.08	2	161.00	5 At/Above Legal Loads	32.6	32.6				980	2000	2%
			3	5 Prestressed Concrete	02 Stringer/Girder	1 Concrete-Cast-in-Place	1 Monolithic Concrete	0	19.81	60.66		0.00	13.26	14.08	2	161.00	5 At/Above Legal Loads	32.6	32.6				830	2000	2%
			2	5 Prestressed Concrete	02 Stringer/Girder	1 Concrete-Cast-in-Place	1 Monolithic Concrete	0	15.24	31.39		0.00	13.26	14.08	2	161.00	5 At/Above Legal Loads	32.6	32.6				1,110	2000	2%
			3	5 Prestressed Concrete	02 Stringer/Girder	1 Concrete-Cast-in-Place	1 Monolithic Concrete	20	30.48	78.03		0.00	13.26	14.08	2	161.00	5 At/Above Legal Loads	32.6	34.6				1,110	2000	2%
			3	3 Steel	19 Culvert	N N/A (NBI)	6 Bituminous	0	3.25	13.2		0.00	0.00	0.00	2	161.00	5 At/Above Legal Loads	32.6	32.6				1,110	2000	2%
			1	5 Prestressed Concrete	02 Stringer/Girder	1 Concrete-Cast-in-Place	1 Monolithic Concrete	10	15.24	15.85		0.00	12.74	14.90	2	161.00	5 At/Above Legal Loads	32.6	50.8				1,110	2000	2%
			3	7 Wood or Timber	02 Stringer/Girder	8 Wood or Timber	6 Bituminous	0	5.79	17.68		0.00	8.60	9.14	2	161.00	5 At/Above Legal Loads	21.7	29				1,110	2000	2%
			3	7 Wood or Timber	02 Stringer/Girder	8 Wood or Timber	6 Bituminous	0	5.79	17.68		0.00	8.60	9.14	2	161.00	5 At/Above Legal Loads	24.4	26.3				1,110	2000	2%
			5	1 Concrete	04 Tee Beam	N N/A (NBI)	0 None	45	18.29	56.69		6.83	7.32	8.29	2	161.00	5 At/Above Legal Loads	16.3	51.7				1,110	2000	2%
			2	3 Steel	19 Culvert	N N/A (NBI)	6 Bituminous	20	3.05	7.62		0.00	0.00	0.00	2	161.00	5 At/Above Legal Loads	32.6	32.6				1,360	2000	2%
			3	4 Steel Continuous	02 Stringer/Girder	1 Concrete-Cast-in-Place	1 Monolithic Concrete	0	28.04	74.37		0.00	8.53	10.15	2	161.00	5 At/Above Legal Loads	24.4	35.3				3,830	2000	2%
			2	5 Prestressed Concrete	02 Stringer/Girder	1 Concrete-Cast-in-Place	1 Monolithic Concrete	0	15.24	31.39		0.00	11.89	12.80	2	199.00	5 At/Above Legal Loads	32.6	32.6				1,470	2000	2%
			4	2 Concrete Continuous	01 Slab	1 Concrete-Cast-in-Place	1 Monolithic Concrete	0	7.62	28.04		0.00	12.19	13.11	2	199.00	5 At/Above Legal Loads	32.6	44.4				1,300	2000	2%
			4	2 Concrete Continuous	01 Slab	1 Concrete-Cast-in-Place	6 Bituminous	0	7.62	28.04		0.00	12.19	13.11	2	199.00	5 At/Above Legal Loads	32.6	44.4				1,300	2000	2%
			3	5 Prestressed Concrete	02 Stringer/Girder	1 Concrete-Cast-in-Place	1 Monolithic Concrete	0	18.90	49.99		0.00	9.14	10.88	2	199.00	5 At/Above Legal Loads	32.6	35.3				1,300	2000	2%
			3	4 Steel Continuous	02 Stringer/Girder	1 Concrete-Cast-in-Place	1 Monolithic Concrete	0	17.68	46.94		0.00	7.92	10.52	2	199.00	5 At/Above Legal Loads	17.2	37.1				1,300	2000	2%
			3	4 Steel Continuous	02 Stringer/Girder	1 Concrete-Cast-in-Place	1 Monolithic Concrete	0	22.86	59.13		0.00	11.98	12.89	2	199.00	5 At/Above Legal Loads	32.6	32.6				1,170	2000	2%
			3	3 Steel	19 Culvert	N N/A (NBI)	6 Bituminous	0	3.05	11.89		0.00	0.00	0.00	2	199.00	5 At/Above Legal Loads	32.6	32.6				1,170	2000	2%
			2	3 Steel	19 Culvert	N N/A (NBI)	6 Bituminous	0	2.44	6.4		0.00	0.00	0.00	2	199.00	5 At/Above Legal Loads	32.6	32.6				1,170	2000	2%
			2	5 Prestressed Concrete	02 Stringer/Girder	1 Concrete-Cast-in-Place	1 Monolithic Concrete	30	25.91	52.73		0.00	8.53	9.72	2	199.00	5 At/Above Legal Loads	32.6	34.4				1,170	2000	2%
			4	5 Prestressed Concrete	02 Stringer/Girder	1 Concrete-Cast-in-Place	1 Monolithic Concrete	0	27.43	108.51		0.00	8.53	9.72	2	199.00	5 At/Above Legal Loads	32.6	38.1				1,150	2000	2%
			3	5 Prestressed Concrete	02 Stringer/Girder	1 Concrete-Cast-in-Place	1 Monolithic Concrete	0	15.24	43.89		0.00	12.34	12.95	2	199.00	5 At/Above Legal Loads	32.6	32.6				1,150	2000	2%
			1	5 Prestressed Concrete	02 Stringer/Girder	1 Concrete-Cast-in-Place	1 Monolithic Concrete	0	17.98	18.29		0.00	12.19	12.90	2	199.00	5 At/Above Legal Loads	32.6	32.6				1,200	2000	2%
			2	5 Prestressed Concrete	02 Stringer/Girder	1 Concrete-Cast-in-Place	1 Monolithic Concrete	12	18.29	37.19		0.00	12.19	12.90	2	99.00	5 At/Above Legal Loads	32.6	32.6				1,200	2000	2%

Montana Department of Transportation

INITIAL ASSESSMENT FORM FOR STRUCTURE :

P00001458+03301

Location : 4M E DODSON Structure Name: none

General Location Data

District Code, Number, Location : **04 Dist 4 GLENDIVE**

Division Code, Location : **42 WOLF POINT**

County Code, Location : **071 PHILLIPS**

City Code, Location : **00000 RURAL AREA**

Kind fo Hwy Code, Description : **2 2 U.S. Numbered Hwy**

Signed Route Number : **00002**

Str Owner Code, Description : **1 State Highway Agency**

Maintained by Code, Description : **1 State Highway Agency**

Intersecting Feature : **BN RAILROAD**

Kilometer Post, Mile Post : **737.61 km 457.32**

Structure on the State Highway System : ☒

Latitude : **48°22'48"**

Structure on the National Highway System : ☒

Longitude : **108°09'30"**

Str Meet or Exceed NBIS Bridge Length : ☒

Construction Data

Construction Project Number : **WPGH 153(B)44**

Construction Station Number : **237+73.00**

Construction Drawing Number : **1494**

Construction Year : **1936**

Reconstruction Year :

Traffic Data

Current ADT : **1,110**

ADT Count Year : **2000**

Percent Trucks : **2 %**

Structure Loading, Rating and Posting Data

Loading Data :

Design Loading :		**2 M 13.5 (H 15)**
Inventory Load, Design :	**16.3 mton**	**2 AS Allowable Stress**
Operating Load, Design :	**51.7 mton**	**2 AS Allowable Stress**
Posting :		**5 At/Above Legal Loads**

Rating Data :	Operating	Inventory	Posting
Truck Type 1 :			
Truck Type 2 :			
Truck Type 3 :	99		

Structure, Roadway and Clearance Data

Structure Deck, Roadway and Span Data :

Structure Length : **56.69 m**

Deck Area : **470.00 m sq**

Deck Roadway Width : **7.32 m**

Approach Roadway Width : **9.14 m**

Median Code, Description : **0 No median**

Structure Vertical and Horizontal Clearance Data :

Vertical Clearance Over the Structure : **99.99 m**

Reference Feature for Vertical Clearance : **R Railroad beneath struc**

Vertical Clearance Under the Structure : **6.83 m**

Reference Feature for Lateral Underclearance : **R Railroad beneath struc**

Minimum Lateral Under Clearance Right : **4.15 m**

Minimum Lateral Under Clearance Left : **0.00 m**

Span Data

Main Span

Number Spans : **5**

Material Type Code, Description : **1 Concrete**

Span Design Code, Description : **4 Tee Beam**

Deck

Deck Structure Type : **N Not applicable**

Deck Surfacing Type : **0 None (no additional concrete thickness or wearing s**

Deck Protection Type : **0 None**

Deck Membrain Type : **0 None**

Approach Span

Number of Spans : **0**

Material Type Code, Description :

Span Design Code, Description :

(52) Out-to-Out Width : **8.29 m**

(50A) Curb Width : **0.00 m**

(50B) Curb Width : **0.00 m**

Skew Angle : **45°**

Structure Vertical and Horizontal Clearance Data Inventory Route :

Over / Under Direction Name	Inventory Route	South, East or Bi-directional Travel			North or West Travel		
		Direction	Vertical	Horizontal	Direction	Vertical	Horizontal
Route On Structure	P00001	Both	99.99 m	7.32 m	N/A		

INITIAL ASSESSMENT FORM FOR STRUCTURE :

P00001458+03301
Continue

Inspection Data

Sufficiency Rating : **33**
Health Index : **72.03**
Structure Status :**Not Deficient**

Inspection Due Date : 01 July 2004
(91) Inspection Fequency (months) : **24**

NBI Inspection Data

(90) Date of Last Inspection : 01 July 2002
Last Inspected By : Larry Greufe - 87
(90) Inspection Date :
Inspected By :

(58) Deck Rating : 5
(59) Superstructure Rating : 5
(60) Substructure Rating : 6
(72) App Rdwy Align : 6

(68) Deck Geometry : 4
(67) Structure Rating : 4
(69) Under Clearance : 5
(41) Posting Status : A

(36C) Approach Rail Rating : 1
(36A) Bridge Rail Rating : 0
(36B) Transition Rating : 1
(36D) End Rail Rating : 0

(62) Culvert Rating : N
(61) Channel Rating : N
(71) Waterway Adequacy : N
(113) Scour Critical : N

Unrepaired Spalls : 9 m sq
Deck Surfacing Depth : 0.00 in

Inspection Hours

Crew Hours for inspection : 2.5
Helper Hours :
Special Crew Hours :
Special Equipment Hours :

Snooper Required : Y
Snooper Hours for inspection : 2
Flagger Hours : 2

Inspection Work Candidates Candidate ID	Date Requested	Status	Priority	Effected Structure Unit	Scope of Work	Action	Covered Condition States
D42-FY2002-000003	**17 July 2002**	**2 Not Approved**	**2 Low**	All Spans	234 R/Conc Cap	Min Repair	

Clean off caps.

MDT *Montana Department of Transportation*

INITIAL ASSESSMENT FORM FOR STRUCTURE :

P00001458+03301
Continue

Element Inspection Data

********** Span : **Main-0** **********

Element Description

Smart Flag	Scale Factor	Env	Quantity	Units	Insp Each	Pct Stat 1	Pct Stat 2	Pct Stat 3	Pct Stat 4	Pct Stat 5

Element 110 - R/Conc Open Girder

	1	2	227	m.		0	90	10	0	
						%	%	%	%	

Previous Inspection Notes :

07/01/2002 - Add: Random cracking, start of delamination on right exterior girder below drains, span 3, "see photo". Deck was chained dragged, no change.
10/10/2000 - Add: +/- 10% delaminations

02/18/1999 - Deck shows +/- 5% delamination, surface has numerous popouts, medium scaling +/- 1" (previous photo). Underside of deck has some efflorescence. Concrete beams have some spalls at ends (previous photo). Beams have numerous vertical cracks and have a horizontal crack at tops of beams near or at where deck and beam meet for the whole length of span in SPAN 3 (previous photo). Other spans have some vertical hairline random cracking. Diaphragms have some light cracking.

10/17/1996 - None

11/01/1994 - None

Inspection Notes:

Element 205 - R/Conc Column

	1	1	8	ea.		50	50	0	0	
						%	%	%	%	

Previous Inspection Notes :

07/01/2002 - Same as 1999

10/10/2000 - None

02/18/1999 - All BENTS except BENT 3 have spalls or delaminations on concrete columns.

10/17/1996 - None

11/01/1994 - None

Inspection Notes:

Element 215 - R/Conc Abutment

	1	1	26	m.		75	25	0	0	
						%	%	%	%	

Previous Inspection Notes :

07/01/2002 - Same as 1999

10/10/2000 - None

02/18/1999 - Vertical crack RT side of Abut 1 showing efflorescence. Some hairline cracking.

10/17/1996 - None

11/01/1994 - None

Inspection Notes:

INITIAL ASSESSMENT FORM FOR STRUCTURE :

P00001458+03301

Continue

********** Span : Main-0 (cont.) **********

Element Description

Element 234 - R/Conc Cap

Smart Flag	Scale Factor	Env	Quantity	Units	Insp Each	Pct Stat 1	Pct Stat 2	Pct Stat 3	Pct Stat 4	Pct Stat 5
	1	2	42	m.		45	50	5	0	
						%	%	%	%	

Previous Inspection Notes :

07/01/2002 - Same as 1999

10/10/2000 - None

02/18/1999 - Some popouts with rebar exposed, minor section loss. Some vertical hairline cracks.

10/17/1996 - None

11/01/1994 - None

Inspection Notes:

Element 304 - Open Expansion Joint

Smart Flag	Scale Factor	Env	Quantity	Units	Insp Each	Pct Stat 1	Pct Stat 2	Pct Stat 3	Pct Stat 4	Pct Stat 5
	1	2	46	m.		0	100			
						%	%	%		

Previous Inspection Notes :

07/01/2002 - Same as 1999

10/10/2000 - None

02/18/1999 - Armor has some section loss and some light corrosion. There are some good spalls at some joints, but armor doesn't appear to be loose. Joint material has fallen out allowing gravel onto caps.

10/17/1996 - None

11/01/1994 - None

Inspection Notes:

Element 311 - Moveable Bearing

Smart Flag	Scale Factor	Env	Quantity	Units	Insp Each	Pct Stat 1	Pct Stat 2	Pct Stat 3	Pct Stat 4	Pct Stat 5
	1	2	12	ea.		0	65	35		
						%	%	%		

Previous Inspection Notes :

07/01/2002 - Add: The left bearing at pier 3 is shifted 2 1/4" right, and is 2" ahead on line from being centered under the bearing plate, "see updated photo".
10/10/2000 - Add: The broken ear at Lt. bearing at pier 3 is now 2 1/4" from the end of the rocker to the edge of the plate. The top of the bearing plates on the cap of pier 3 have minor section loss from rust.
02/18/1999 - Span at BENT 3 has slid RT about 2". The slide stops on shoes are bent or broken (previous photo). The rollers are either in expanded postion or no longer centered under beams bearing plate (previous photo).

10/17/1996 - None

11/01/1994 - None

Inspection Notes:

INITIAL ASSESSMENT FORM FOR STRUCTURE :

P00001458+03301
Continue

********** Span : **Main-0 (cont.)** **********

Element Description										
Smart Flag	Scale Factor	Env	Quantity	Units	Insp Each	Pct Stat 1	Pct Stat 2	Pct Stat 3	Pct Stat 4	Pct Stat 5
Element 313 - Fixed Bearing										
	1	2	28	ea.		0	100	0		
	.					%	%	%		

Previous Inspection Notes :

07/01/2002 - Same

10/10/2000 - Light rust on bearings.

02/18/1999 - None

10/17/1996 - None

11/01/1994 - None

Inspection Notes:

Element 334 - Metal Rail Coated										
	1	2	114	m.		0	100	0	0	0
						%	%	%	%	%

Previous Inspection Notes :

07/01/2002 - Same

10/10/2000 - Add: Rail has minor collision damage.

02/18/1999 - Concrete curb and old rail have spalls with exposed rebar. Curbs have severe scaling with exposed rebar on inside and outside surfaces.

10/17/1996 - None

11/01/1994 - None

Inspection Notes:

General Inspection Notes

07/01/2002 - Add: Three missing bolts and one minor rip in rail, "see photo".

10/10/2000 - None

02/18/1999 - None

10/17/1996 - Sufficiency Rating Calculation Accepted by ops$a0241 at 8/14/97 13:03:49
OPS$A0241 inspection comments -
Structure P00001458+03301 -
Date 10/17/96 -
Previous comments > Sufficiency Rating Calculation Accepted by ops$u5963 at 3/10/97 11:19:22
Sufficiency Rating Calculation Accepted by ops$u9004 at 2/19/97 14:57:34

11/01/1994 - Sufficiency Rating Calculation Accepted by ops$u5963 at 3/10/97 11:19:22
Sufficiency Rating Calculation Accepted by ops$u9004 at 2/19/97 14:57:34

U.S. Department of Transportation
Federal Highway Administration

FINAL NATIONWIDE SECTION 4(F) EVALUATION AND APPROVAL FOR FEDERALLY-AIDED HIGHWAY PROJECTS WITH MINOR INVOLVEMENTS WITH HISTORIC SITES

This programmatic Section 4(f) evaluation has been prepared for projects which improve existing highways and use minor amounts of land (including non-historic improvements thereon) from historic sites that are adjacent to existing highways. This programmatic Section 4(f) evaluation satisfies the requirements of Section 4(f) for all projects that meet the applicability criteria listed below. No individual Section 4(f) evaluations need be prepared for such projects. (Note a similar programmatic Section 4(f) evaluation has been prepared for projects which use minor amounts of publicly owned public parks, recreation lands, or wildlife and waterfowl refuges).

The FHWA Division Administrator is responsible for reviewing each individual project to determine that it meets the criteria and procedures of this programmatic Section 4(f) evaluation. The Division Administrator's determinations will be thorough and will clearly document the items that have been reviewed. The written analysis and determinations will be combined in a single document and placed in the project record and will be made available to the public upon request. This programmatic evaluation will not change the existing procedures for project compliance with the National Environmental Policy Act (NEPA) or with public involvement requirements.

Applicability

This programmatic Section 4(f) evaluation may be applied by FHWA only to projects meeting the following criteria:

1. The proposed project is designed to improve the operational characteristics, safety, and/or physical condition of existing highway facilities on essentially the same alignment. This includes"4R" work (resurfacing, restoration, rehabilitation and reconstruction); safety improvements, such as shoulder widening and the correction of substandard curves and intersections; traffic operation improvements, such as signalization, channelization, and turning or climbing lanes; bicycle and pedestrian facilities; bridge replacements on essentially the same alignment, and the construction of additional lanes. This programmatic Section 4(f) evaluation does not apply to the construction of a highway on a new location.

2. The historic site involved is located adjacent to the existing highway.

3. The project does not require the removal or alteration of historic buildings, structures or objects on the historic site.

4. The project does not require the disturbance or removal of archeological resources that are important to preserve in place rather than to remove for archeological research. The determination of the importance to preserve in place will be based on consultation with the State Historic Preservation Officer (SHPO) and, if appropriate, the Advisory Council on Historic Preservation (ACHP).

5. The impact on the Section 4(f) site resulting from the use of the land must be considered minor. The word minor is narrowly defined as having either a "no effect" or "no adverse effect" (when applying the requirements of Section 106 of the National Historic Preservation Act and 36 CFR Part 800) on the qualities which qualified the site for listing or eligibility on the National Register of Historic Places. The ACHP must not object to the determination of "no adverse effect."

6. The SHPO must agree, in writing with the assessment of impacts of the proposed project on and the proposed mitigation for the historic sites.

7. This programmatic evaluation does not apply to projects for which an environmental impact statement (EIS) is prepared, unless the use of Section 4(f) lands is discovered after the approval of the final EIS.
Should any of the above criteria not be met, this programmatic Section 4(f) evaluation cannot be used, and an individual Section 4(f) evaluation must be prepared.

Alternatives

The following alternatives avoid any use of the historic site.

1. Do nothing.
2. Improve the highway without using the adjacent historic site.
3. Build an improved facility on new location without using the historic site.

This list is intended to be all-inclusive. The programmatic Section 4(f) evaluation does not apply if a feasible and prudent alternative is identified that is not discussed in this document. The project record must clearly demonstrate that each of the above alternatives was fully evaluated before the FHWA Division Administrator concluded that the programmatic Section 4(f) evaluation applied to the project.

Findings

In order for this programmatic Section 4(f) evaluation to be applied to a project, each of the following findings must be supported by the circumstances, studies, and consultations on the project:

1. Do Nothing Alternative The Do Nothing Alternative is not feasible and prudent because: (a) it would not correct existing or projected capacity deficiencies or; (b) it would not correct existing safety hazards; or (c) it would not correct existing deteriorated conditions and maintenance problems; and (d) not providing such correction would constitute a cost or community impact of extraordinary magnitude, or would result in truly unusual or unique problems, when compared with the proposed use of the Section 4(f) lands.

2. Improvement without Using the Adjacent Section 4(f) Lands It is not feasible and prudent to avoid Section 4(f) lands by roadway design or transportation system management techniques (including, but not limited to, minor alignment shifts, changes in geometric design standards, use of retaining walls and/or other structures, and traffic diversions or other traffic management measures) because implementing such measures would result in: (a) substantial adverse community impacts to adjacent homes, businesses or other improved

properties; or (b) substantially increased roadway or structure cost; or (c) unique engineering, traffic, maintenance, or safety problems, or (d) substantial adverse social, economic, or environmental impacts; or (e) the project not meeting identified transportation needs; and (f) the impacts, costs, or problems would be truly unusual or unique, or of extraordinary magnitude when compared with the proposed use of Section 4(f) lands. Flexibility in the application of American Association of State Highway and Transportation officials (AASHTO) geometric standards should be exercised, as permitted in 23 CFR 625, during the analysis of this alternative.

3. Alternatives on New Location It is not feasible and prudent to avoid Section 4(f) lands by constructing on new alignment because (a) the new location would not solve existing transportation safety or maintenance problems; or (b) the new location would result in substantial adverse social, economic, or environmental impacts (including such impacts as extensive severing of productive farmlands, displacement of a substantial number of families or businesses, serious disruption of established travel patterns, substantial damage to wetlands or other sensitive natural areas, or greater impacts to other Section 4(f) lands); or (c) the new location would substantially increase costs or engineering difficulties (such as an inability to achieve minimum design standards, or to meet the requirements of various permitting agencies such as those involved with navigation, pollution, and the environment); and (d) such problems, impacts, costs, or difficulties would be truly unusual or unique, or of extraordinary magnitude when compared with the proposed use of Section 4(f) lands. Flexibility in the application of AASHTO geometric standards should be exercised, as permitted in 23 CFR 625, during the analysis of this alternative.

Measures to Minimize Harm

This programmatic Section 4(f) evaluation and approval may be used only for projects where the FHWA Division Administrator, in accordance with this evaluation, ensures that the proposed action includes all possible planning to minimize harm. Measures to minimize harm will consist of those measures necessary to preserve the historic integrity of the site and agreed to, in accordance with 36 CFR Part 800 by the FHWA, the SHPO, and as appropriate, the ACHP.

Coordination

The use of this programmatic evaluation and approval is conditioned upon the satisfactory completion of coordination with the SHPO, the ACHP, and interested persons as called for in 36 CFR Part 800. Coordination with interested persons, such as the local government, the property owner, a local historical society, or an indian tribe, can facilitate in the evaluation of the historic resource values and mitigation proposals and is therefore highly encouraged.

For historic sites encumbered with Federal .interests, coordination is required with the Federal agencies responsible for the encumbrances.

Before applying this programmatic evaluation to projects requiring an individual bridge permit, the Division Administrator shall coordinate with the U.S. Coast Guard District Commander.

Approval Procedure:

This programmatic Section 4(f) approval applies only after the FHWA Division Administrator has:

1. Determined that the project meets the applicability criteria set forth above;

2. Determined that all of the alternatives set forth in the Findings section have been fully evaluated;

3. Determined that the findings in this document (which conclude that there are no feasible and prudent alternatives to the use of land from or non-historic improvements on the historic site) are clearly applicable to the project;

4. Determined that the project complies with the Measures to Minimize Harm section of this document;

5. Determined that the coordination called for in this programmatic evaluation has been successfully completed;

6. Assured that the measures to minimize harm will be incorporated in the project; and

7. Documented the project file clearly identifying the basis for the above determinations and assurances.

Issued on: 12/23/86

Approved:
/Original Signed By/
Ali Sevin, Director
Office of Environmental Policy
Federal Highway Administration

Appendix D: Public Involvement

For further information, contact:
Bruce Russell -- 365-5296
Dan Bartsch -- 444-6245

DATE: January 6, 1992

Project: F 1-8(15)
Dodson - East
1516

IMPROVEMENTS PLANNED

Plans are being prepared to reconstruct a section of US 2 in Phillips County according to a spokesman for the Department of Transportation.

The project will begin just east of the USRS Main Canal bridge in Dodson and extend 4.5 miles easterly to the east end of the B.N. Railroad overpass.

Work will involve construction of a new roadway with a 32-foot paved surface on a subgrade which can be widened to 36-feet in the future. Improvements will also include flattening and straightening curves, flattening slopes, updating guardrail, signing & striping. Some utilities will be relocated and additional right-of-way purchased.

No contract letting date has been set, and will depend on availability of funding and completion of design features.

For more information or to comment on the proposal, contact Mr. Bruce Russell, District Engineer, 503 N. River Ave, PO Box 890, Glendive, MT 59330, phone 365-5296 or Dan Bartsch, Information Officer, 2701 Prospect Avenue, Helena, MT 59620, phone 444-6245.

DPB:D:PAF:cm:7.gh

RECEIVED
DEC 08 1998
ENVIRONMENTAL

J M Marshik

FILE
COPY

Montana Department of Transportation
Helena, Montana 59620-1001

Memorandum

To: Carl S. Peil, P.E.
Preconstruction Engineer

From: Ronald E. Williams, P.E. REW
Road Design Engineer

Date: December 7, 1998

Subject: F 1-8(15)454 F
Dodson - East
Control No. 1516

A Public Informational Meeting was held for the subject project on November 18, 1998 in Dodson. The project begins in Dodson at RP 454.1 and extends to RP 458.6. The proposed scope of the project is to reconstruct the roadway to a 12.0 m finished top width. The top width of the existing roadway varies from 7.9 m to 9.1 m. The project also includes the replacement of the railroad overpass at RP 458.3. The overpass was constructed in 1936. It provides a 7.3 m roadway width and has a Sufficiency Rating of 32.

The BN Railroad parallels the PTW on the north throughout the entire length of the project except in the vicinity of the overpass. The USRS Canal parallels the PTW on the south from approximately RP 455.0 to RP 456.6. Consequently, the roadway cannot be reconstructed on its present alignment, because of its proximity to the railroad and the USRS Canal. The following alignment options were presented at the meeting.

1. The alignment would be shifted slightly to the south. It would require the relocation of the USRS Canal. This option has the least amount of impacts to adjacent cultivated lands and wetlands.

2. The alignment would be shifted south of the canal. This option would require 2 bridge crossings of the USRS Canal. The impacts to cultivated lands would not be much different than the impacts resulting from Option 1. However, this option would have greater wetland impacts. We believe the cost of constructing 2 bridges over the canal would be greater than the cost of relocating the canal. A cost comparison will probably be necessary

3. The alignment would be shifted north of the railroad. Because of the clearance requirements over the railroad,

we probably cannot provide a vertical alignment that will match the existing elevations in Dodson and provide adequate stopping sight distance.

4. The alignment would be shifted to the existing bench land north of the railroad. The alignment would bypass the town of Dodson and tie to the existing roadway approximately 4 km west of town. This alignment would possibly relieve the State of the liability for flooding that has occurred in the vicinity of town. This option would add approximately 6 km to the length of the project

The people who attended the meeting generally preferred Option 1 or 3. As noted above, we have tentatively eliminated Option 3 due to the vertical alignment problems associated with a new railroad overpass close to Dodson. The majority of attendees were adamantly opposed to Option 4. They felt it would ruin the economy of the town. They were also concerned with access to U.S. 2 and landowner impacts west of town.

Since Dodson is an incorporated community, the town council must approve a change in the route that would by pass the town. We have requested that the council submit a letter stating their position on Option 4.

We anticipate that we will proceed with the development of Option 1. However, after we receive the City of Dodson's letter we will contact the Bureau of Reclamation to determine if they will allow the relocation of the USRS Canal.

As soon as an alignment is selected, we will also contact Burlington Northern to begin the agreement process for the construction of the new overpass and the removal of the existing structure.

In addition, to the alignment options, we discussed the placement of curb and gutter in town. The attendees approved of its placement on the south but had questions about its practicality on the north. This will be reviewed later in the project development process.

If you need additional information, please contact Paul Ferry.

REW.pf

cc: R. E. Williams
M. P. Johnson
D. R. McIntyre
T. E. Martin
J. M. Marshik
D. A. Dreher
J. P. Kolman
Precon File

Edie

Date Recd Preconst 12/10/90
MAIL ROUTE
Act | Info | Attach | Initial
30 Preconst Engr
Assistant
30 Office Mgr
32 Road Design
33 Environment
34 Hydraulics
35 Survey & Mapping
36 Traffic
Consultant

MONTANA DEPARTMENT OF HIGHWAYS
Glendive, Montana 59330-0890

MEMORANDUM

TO: File

FROM: Arthur D. Anderson
District Engineering Services Supervisor

RE: F 1-8(NP)454
Dodson - East

DATE: December 10, 1990

Bruce Russell, District Engineer and myself met with Dodson town council to explain subject projects proposed scope of work and to receive their comments. Meeting took place at Dodson town hall, 7:30 p.m. on December 3, 1990. Following comments were received:

1. Traffic Data

   a. Would like some type of device to slow traffic down to the posted 30 MPH limit. Most town traffic crosses P-1 at Barret Avenue.

   b. Would like cross walk crossing P-1 east side to Barret Avenue (town's only grocery store left station 23±75).

2. Lighting

   a. Do not add any new luminaires - their utility bills are current at their maximum budget.

3. Drainage

   a. Proposed drain ditch north of P-1 should be adjacent to the railroad tracks (station 15+00 to station 42+00) and behind the fire station and grocery store.

   b. Drainage under Barret Avenue left station 23±00 should be installed with an irrigation check gate. Barret Avenue north of P-1 serves as a dike when Dodson creek overflow floods.

4. Sidewalk

   a. Would like new sidewalk right between Michigan and Barret Avenues. Currently 3/4 of this block has a sidewalk (poor condition).

5. Gas Stations

   a. Town council thought all three gas stations still had underground tanks.

6. Utilities

   A. Town of Dodson has water lines crossing P-1 at the elevator and stockyards.

7. Signing

   a. Outdoor Advertising Control program was explained.

8. Alternate Alignments

   a. The four (4) proposed alternate alignments were reviewed and at this time, the council didn't support any alternate. They supported the proposed urban section and the project.

ADA:jlw:lp

cc: Ron Williams
District File